

Berkshire Encyclopedia of

World History



VOLUME **I**

William H. McNeill

Senior Editor

Jerry H. Bentley, David Christian,
David Levinson, J. R. McNeill,
Heidi Roupp, Judith P. Zinsser

Editors

A BERKSHIRE REFERENCE WORK

BERKSHIRE PUBLISHING GROUP

Great Barrington, Massachusetts U.S.A.
www.berkshireworldhistory.com



Copyright © 2005 by Berkshire Publishing Group LLC

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

Cover design: Lisa Clark, LKC Design

For information:

Berkshire Publishing Group LLC
314 Main Street
Great Barrington, Massachusetts 01230
www.berkshirepublishing.com

Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Berkshire encyclopedia of world history / William H. McNeill, senior editor ; Jerry H. Bentley ...
[et al.] editorial board.

p. cm.

Summary: "A comprehensive encyclopedia of world history with 538 articles that trace the development of human history with a focus on area studies, global history, anthropology, geography, science, arts, literature, economics, women's studies, African-American studies, and cultural studies related to all regions of the world"—Provided by publisher.

Includes bibliographical references and index.

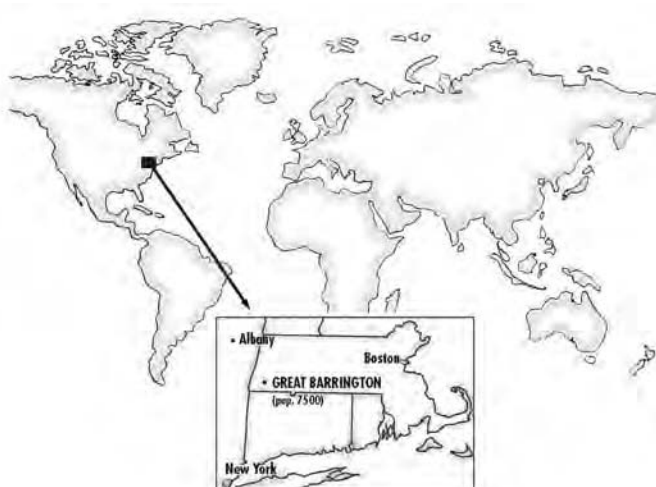
ISBN 0-9743091-0-9 (alk. paper : v. 1)

1. World history—Encyclopedias. I. McNeill, William Hardy, 1917– II. Bentley, Jerry H., 1949– III. Christian, David, 1946–

D23.B45 2004

903—dc22

2004021830



Editorial & Production Staff

Project Director

Karen Christensen

Editorial and Production Staff

Karen Advokaat, Rachel Christensen,
Tom Christensen, Emily Colangelo, Sarah Conrick,
Benjamin Kerschberg, Junhee (June) Kim,
Jess LaPointe, David Levinson, Courtney Linehan,
Janet Lowry, Marcy Ross, Gabby Templet

Photo Researcher

Gabby Templet

Copyeditors

Francesca Forrest, Mike Nichols, Carol Parikh,
Mark Siemens, Daniel Spinella, and Rosalie Wieder

Information Management and Programming

Deborah Dillon and Trevor Young

Designers

Lisa Clark and Jeff Potter

Printers

Thomson-Shore, Inc.

Map Maker

XNR Productions

Composition Artists

Steve Tiano, Brad Walrod, and Linda Weidemann

Production Coordinators

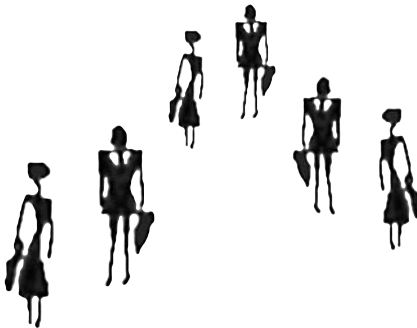
Benjamin Kerschberg and Marcy Ross

Proofreaders

Mary Bagg, Sue Boshers, Robin Gold, Libby Larson,
Amina Sharma, and Barbara Spector

Indexers

Peggy Holloway and Barbara Lutkins



Contents

List of Entries, ix
Categories, xv
Reader's Guide, xvii
Maps, xxvii
Contributors, xxix
Preface, xli
*A Long March: Creating the
Berkshire Encyclopedia of World History*, xlv
Acknowledgments, xlix
Editorial Board, li
About William H. McNeill, Senior Editor, liii
About the Editors, lv
Photo and Quotation Credits, lvii
Berkshire World History Library, lix
World History—About the Design, lxi
*How to Spell It and How to Say It:
100 Important People, Places, and Terms in World History*, lxiii
This Fleeting World: An Overview of Human History, TFW-1
CHAPTER ONE: *Foraging Era*, TFW-2
CHAPTER TWO: *Agrarian Era*, TFW-15
CHAPTER THREE: *Modern Era*, TFW-36

Entries

VOLUME I:
Abraham—Coal
1

VOLUME II:
Cold War—Global Imperialism and Gender
376

Entries

VOLUME III:
Global Migrations in Modern Times—Mysticism
844

VOLUME IV:
Napoleon—Sun Yat-sen
1327

VOLUME V:
Tang Taizong—Zoroastrianism
1802

This Fleeting World: An Overview of Human History, TFW-1

CHAPTER ONE: *Foraging Era*, TFW-2

CHAPTER TWO: *Agrarian Era*, TFW-15

CHAPTER THREE: *Modern Era*, TFW-36

Index, 2123



Entries

- This Fleeting World*,
by David Christian
Agrarian Era
Foraging (Paleolithic) Era
Modern Era
- Abraham
Absolutism, European
Adolescence
Africa
Africa, Colonial
Africa, Postcolonial
African Religions
African Union
African-American and
Caribbean Religions
Afro-Eurasia
Age Stratification
Agricultural Societies
AIDS
Airplane
Akbar
Aksum
Alchemy
Alcohol
Alexander the Great
al-Khwarizmi
al-Razi
American Empire
Andean States
Animism
- Anthropology
Anthroposphere
Apartheid in South Africa
Arab Caliphates
Arab League
Archaeology
Architecture
Aristotle
Art—Africa
Art—Ancient Greece and Rome
Art—Central Asia
Art—East Asia
Art—Europe
Art—Native North America
Art—Overview
Art—Russia
Art—South Asia
Art—Southeast Asia
Art—West Asia
Art, Paleolithic
Asia
Asian Migrations
Asoka
Association of Southeast
Asian Nations
Assyrian Empire
Augustine, St.
Aurangzeb
Austro-Hungarian Empire
Automobile
Aztec Empire
- Babi and Baha'i
Babylon
Balance of Power
Bands, Tribes, Chiefdoms,
and States
Barter
Benin
Berlin Conference
Biological Exchanges
Bolívar, Simón
British East India Company
British Empire
Buddhism
Bullroarers
Byzantine Empire
- Caesar, Augustus
Caesar, Julius
Capitalism
Caravan
Carrying Capacity
Cartography
Catherine the Great
Catholicism, Roman
Celts
Cereals
Charlemagne
Charles V
Child, Lydia
Childhood
China

- Chinese Popular Religion
 Churchill, Winston
 Cinchona
 Citizenship
 Civil Disobedience
 Civil Law
 Civilization, Barbarism, Savagery
 Climate Change
 Coal
 Coffee
 Cold War
 Colonialism
 Columbian Exchange
 Columbus, Christopher
 Comintern
 Communication—Overview
 Communism and Socialism
 Comparative Borders and Frontiers
 Comparative Ethnology
 Comparative History
 Computer
 Confucianism
 Confucius
 Congress of Vienna
 Constantine the Great
 Consumerism
 Containment
 Contraception and Birth Control
 Contract Law
 Creation Myths
 Crusades, The
 Cultural and Geographic Areas
 Cultural Ecology
 Culture
 Cyrus the Great

 Dance and Drill
 Daoism
 Darwin, Charles
 Dating Methods
 Decipherment of Ancient Scripts

 Decolonization
 Deforestation
 Delhi Sultanate
 Democracy, Constitutional
 Descartes, René
 Desertification
 Détente
 Diasporas
 Dictionaries and Encyclopedias
 Diplomacy
 Disease and Nutrition
 Diseases—Overview
 Diseases, Animal
 Diseases, Plant
 Displaced Populations, Typology of
 Dress
 Drugs
 Du Bois, W. E. B.
 Dutch East India Company
 Dutch Empire

 Early Modern World
 Earthquakes
 Eastern Europe
 Economic Growth, Extensive and Intensive
 Ecumenicism
 Education
 Egypt—State Formation
 Egypt, Ancient
 Einstein, Albert
 Electricity
 Elizabeth I
 Empire
 Energy
 Engines of History
 Enlightenment, The
 Equatorial and Southern Africa, 4000 BCE–1100 CE
 Erosion
 Esperanto

 Ethnic Nationalism
 Ethnicity
 Ethnocentrism
 Eurocentrism
 Europe
 European Union
 Expansion, European
 Expeditions, Scientific
 Exploration, Chinese
 Exploration, Space
 Extinctions

 Famine
 Fascism
 Festivals
 Feudalism
 Fire
 Firearms
 First, Second, Third, Fourth Worlds
 Food
 Foraging Societies, Contemporary
 Forms of Government—Overview
 Freedom
 French Empire
 Frontiers
 Fur Trade

 Galileo Galilei
 Gama, Vasco da
 Games
 Gandhi, Mohandas
 Gay and Lesbian Rights Movement
 General Agreement on Tariffs and Trade
 Genetics
 Genghis Khan
 Genocide
 Geographic Constructions
 German Empire
 Glass



- Global Commons
 Global Imperialism and Gender
 Global Migration in Modern Times
 Globalization
 Gold and Silver
 Grand Tour
 Greece, Ancient
 Green or Environmental Movements
 Green Revolution
 Gregory VII
 Guevara, Che
 Guilds
 Gum Arabic

 Hammurabi
 Han Wudi
 Hanseatic League
 Harappan State and Indus Civilization
 Harun al-Rashid
 Hatshepsut
 Hausa States
 Henry the Navigator
 Herodotus
 Hinduism
 Hitler, Adolf
 Ho Chi Minh
 Holocaust
 Homer
 Hong Merchants
 Horticultural Societies
 Hudson's Bay Company
 Human Evolution—Overview
 Human Rights

 Iberian Trading Companies
 Ibn Battuta
 Ibn Khaldun
 Ibn Sina
 Imperialism

 Inca Empire
 Indigenous Peoples
 Indigenous Peoples Movements
 Indo-European Migration
 Industrial Technologies
 Information Societies
 Initiation and Rites of Passage
 Inner Eurasia
 International Court of Justice
 International Criminal Court
 International Law
 International Monetary Systems
 International Organizations—Overview
 Interregional Networks
 Interwar Years (1918–1939)
 Isabella I
 Islam
 Islamic Law
 Islamic World

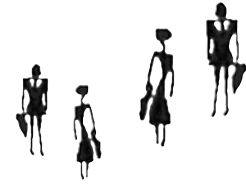
 Jainism
 Japanese Empire
 Jefferson, Thomas
 Jesus
 Joan of Arc
 Judaism
 Justinian I

 Kamehameha I
 Kanem-Bornu
 Kangxi Emperor
 Kenyatta, Jomo
 Khmer Kingdom
 King, Martin Luther, Jr.
 Kinship
 Kongo
 Kushan Empire

 Labor Systems, Coercive
 Labor Union Movements
 Language, Classification of

 Language, Standardization of
 Laozi
 Latter-day Saints
 League of Nations
 Leisure
 Lenin, Vladimir
 Leonardo da Vinci
 Letters and Correspondence
 Liberalism
 Libraries
 Lincoln, Abraham
 Literature and Women
 Locke, John
 Logistics
 Long Cycles
 Luther, Martin

 Macedonian Empire
 Machiavelli, Niccolo
 Magellan, Ferdinand
 Mahavira
 Malaria
 Mali
 Manichaeism
 Manorialism
 Mansa Musa
 Mao Zedong
 Maritime History
 Marriage and Family
 Marx, Karl
 Mass Media
 Mathematics
 Matriarchy and Patriarchy
 Mehmed II
 Mencius
 Mercantilism
 Meroë
 Mesoamerica
 Mesopotamia
 Metallurgy
 Migrations
 Military Engineering



- Military Strategy and Tactics
 Military Training and Discipline
 Millennialism
 Miranda, Francisco de
 Missionaries
 Mississippian Culture
 Modernity
 Money
 Mongol Empire
 Moses
 Motecuhzoma II
 Mughal Empire
 Muhammad
 Multinational Corporations
 Museums
 Music—Genres
 Music and Political Protest
 Mysticism
- Napoleon
 Napoleonic Empire
 Nationalism
 Nation-State
 Native American Religions
 Natural Gas
 Natural Law
 Nature
 Navigation
 Newton, Isaac
 Nkrumah, Kwame
 Nonviolence
 North Atlantic Treaty
 Organization
 Nubians
- Oil
 Oral History
 Organization of American States
 Orientalism
 Orthodoxy, Christian
 Osman I
 Ottoman Empire
- Pacific, Settlement of
 Paleoanthropology
 Pan-Africanism
 Paper
 Parliamentarianism
 Pastoral Nomadic Societies
 Paul, St.
 Peace Making in the Modern Era
 Peace Projects
 Pentecostalism
 Periodization—Overview
 Periodization, Conceptions of
 Persian Empire
 Peter the Great
 Pilgrimage
 Piracy
 Plastics
 Plato
 Political Thought
 Polo, Marco
 Population
 Population Growth as Engine
 of History
 Porcelain
 Portuguese Empire
 Postcolonial Analysis
 Postmodernism
 Production and Reproduction
 Progress
 Property Rights and Contracts
 Protestantism
- Qin Shi Huangdi
 Quinine
- Race and Racism
 Radio
 Railroad
 Ramses II
 Raynal, Abbé Guillaume
 Red Cross and Red Crescent
 Movement
- Religion—Overview
 Religion and Government
 Religion and War
 Religious Freedom
 Religious Fundamentalism
 Religious Syncretism
 Renaissance
 Revolution—China
 Revolution—Cuba
 Revolution—France
 Revolution—Haiti
 Revolution—Iran
 Revolution—Mexico
 Revolution—Russia
 Revolution—United States
 Revolutions, Communist
 Ricci, Matteo
 Roman Empire
 Roosevelt, Eleanor
 Roosevelt, Franklin Delano
 Rubber
 Rumi
 Russian-Soviet Empire
- Sacred Law
 Sailing Ships
 Saladin
 Salt
 Sasanian Empire
 Science—Overview
 Scientific Instruments
 Scientific Revolution
 Secondary-Products Revolution
 Secularism
 Senghor, Léopold
 Sex and Sexuality
 Shaka Zulu
 Shamanism
 Shinto
 Siddhartha Gautama
 Sikhism
 Silk Roads

- Sima Qian
 Slave Trades
 Smith, Adam
 Social Darwinism
 Social History
 Social Sciences
 Social Welfare
 Sociology
 Socrates
 Sokoto Caliphate
 Songhai
 Spanish Empire
 Spice Trade
 Sports
 Srivijaya
 Stalin, Joseph
 State Societies, Emergence of
 State, The
 Steppe Confederations
 Sugar
 Sui Wendi
 Sui Yangdi
 Süleyman
 Sumerian Society
 Sun Yat-sen

 Tang Taizong
 Tea
 Technology—Overview
 Telegraph and Telephone
 Textiles
 Thomas Aquinas, St.
 Thucydides
 Timber
 Time, Conceptions of
 Timur
 Totemism
 Tourism
 Trade Cycles

 Trading Patterns, Ancient American
 Trading Patterns, Ancient European
 Trading Patterns, China Seas
 Trading Patterns, Eastern
 European
 Trading Patterns, Indian Ocean
 Trading Patterns, Mediterranean
 Trading Patterns, Mesoamerican
 Trading Patterns, Pacific
 Trading Patterns, Trans-Saharan
 Transportation—Overview
 Travel Guides
 Treaty of Versailles
 Túpac Amaru
 Turkic Empire
 Tutu, Desmond

 Ugarit
 ‘Umar ibn al-Khattab
 United Nations
 Universe, Origins of
 Urban II
 Urbanization
 Utopia

 Victoria
 Viking Society

 Wagadu Empire
 War and Peace—Overview
 Warfare—Africa
 Warfare—China
 Warfare—Europe
 Warfare—Islamic World
 Warfare—Japan and Korea
 Warfare—Post-Columbian Latin
 America
 Warfare—Post-Columbian North
 America

 Warfare—Pre-Columbian Meso-
 america and North America
 Warfare—Pre-Columbian South
 America
 Warfare—South Asia
 Warfare—Southeast Asia
 Warfare—Steppe Nomads
 Warfare, Air
 Warfare, Comparative
 Warfare, Land
 Warfare, Naval
 Warfare, Origins of
 Warsaw Pact
 Water
 Water Management
 Western Civilization
 Women’s and Gender History
 Women’s Emancipation
 Movements
 Women’s Reproductive Rights
 Movements
 Women’s Suffrage Movements
 World Cities in History—
 Overview
 World Maps, Chinese
 World System Theory
 World War I
 World War II
 Writing Systems and Materials
 Writing World History

 Yijing
 Yongle Emperor

 Zheng He
 Zhu Yuanzhang
 Zimbabwe, Great
 Zionism
 Zoroastrianism

Categories

Africa
Americas
Asia
Europe
Arts and Literature
Biography
Commerce—Organizations and
Institutions
Commerce—Systems and Patterns
Commerce—Trade Goods and
Products
Communication
Conflict and Peace Making—
Diplomacy and Peace Making

Conflict and Peace Making—
War and Conflict
Cultural Contact and Relations
Daily Life
Disciplines and Fields of
Study
Environment and Ecology
Eras, Empires, States, and
Societies
Evolution
Government, Politics, and Law
Health and Disease
International and Regional
Organizations

Migration
Periodization
Philosophy, Thought, and
Ideas
Population
Religion and Belief Systems
Research Methods
Social and Political Movements
Technology and Science
Themes—Models and Processes
Themes—Places
Transportation
Ways of Living
Women and Gender



Reader's Guide

Africa

Africa
Africa, Colonial
Africa, Postcolonial
African Religions
African Union
African-American and Caribbean
 Religions
Afro-Eurasia
Aksum
Apartheid in South Africa
Art—Africa
Benin
Diasporas
Egypt—State Formation
Egypt, Ancient
Equatorial and Southern Africa
Hausa States
Kanem-Bornu
Kenyatta, Jomo
Kongo
Mali
Mansa Musa
Mehmed II
Meroë
Nkrumah, Kwame
Nubians
Pan-Africanism
Pastoral Nomadic Societies
Senghor, Léopold
Shaka Zulu
Slave Trades

Sokoto Caliphate
Songhai
Trading Patterns, Trans-Saharan
Tutu, Desmond
Wagadu Empire
Warfare—Africa
Zimbabwe, Great

Americas

American Empire
Andean States
Art—Native North America
Aztec Empire
Biological Exchanges
Bolívar, Simón
Child, Lydia
Du Bois, W. E. B.
Einstein, Albert
Fur Trade
Guevara, Che
Hudson's Bay Company
Inca Empire
Jefferson, Thomas
King, Martin Luther, Jr.
Latter-day Saints
Lincoln, Abraham
Mississippian Culture
Motecuhzoma II
Native American Religions
Organization of American States
Pentecostalism
Revolution—Cuba

Revolution—Haiti
Revolution—Mexico
Revolution—United States
Roosevelt, Eleanor
Roosevelt, Franklin Delano
Slave Trades
Sugar
Trading Patterns, Ancient American
Trading Patterns, Mesoamerican
Túpac Amaru
Warfare—Post-Columbian Latin
 America
Warfare—Post-Columbian North
 America
Warfare—Pre-Columbian
 Mesoamerica and
 North America
Warfare—Pre-Columbian South
 America
Western Civilization

Asia

Afro-Eurasia
Akbar
Art—Central Asia
Art—East Asia
Art—South Asia
Art—Southeast Asia
Art—West Asia
Asia
Asian Migrations
Asoka

- Association of Southeast Asian Nations
 Aurangzeb
 Babi and Baha'i
 British East India Company
 Buddhism
 China
 Chinese Popular Religion
 Confucianism
 Confucius
 Cyrus the Great
 Daoism
 Delhi Sultanate
 Dutch East India Company
 Genghis Khan
 Han Wudi
 Harappan State and Indus Civilization
 Hinduism
 Ho Chi Minh
 Hong Merchants
 Inner Eurasia
 Islamic Law
 Islamic World
 Jainism
 Japanese Empire
 Khmer Kingdom
 Kushan Empire
 Laozi
 Mahavira
 Mao Zedong
 Mencius
 Mesopotamia
 Mongol Empire
 Mughal Empire
 Orientalism
 Pacific, Settlement of
 Pastoral Nomadic Societies
 Persian Empire
 Polo, Marco
 Porcelain
 Qin Shi Huangdi
 Revolution—China
 Revolution—Iran
 Revolutions, Communist
 Ricci, Matteo
 Rumi
 Sasanian Empire
 Shinto
 Siddhartha Gautama
 Sikhism
 Silk Roads
 Sima Qian
 Spice Trade
 Srivijaya
 Steppe Confederations
 Sui Wendi
 Sui Yangdi
 Süleyman
 Sun Yat-sen
 Tang Taizong
 Tea
 Timur
 Trading Patterns—China Seas
 Trading Patterns—Indian Ocean
 Trading Patterns—Pacific
 Turkic Empire
 'Umar ibn al-Khattab
 Warfare—China
 Warfare—Islamic World
 Warfare—Japan and Korea
 Warfare—South Asia
 Warfare—Southeast Asia
 Warfare—Steppe Nomads
 World Maps, Chinese
 Yijing
 Yongle Emperor
 Zheng He
 Zhu Yuanzhang
 Zoroastrianism
- Europe**
- Afro-Eurasia
 Alexander the Great
 Art—Europe
 Art—Russia
 Berlin Conference
 British East India Company
 British Empire
 Caesar, Augustus
 Caesar, Julius
 Catherine the Great
 Catholicism, Roman
 Celts
 Charlemagne
 Charles V
 Churchill, Winston
 Columbian Exchange
 Columbus, Christopher
 Congress of Vienna
 Crusades, The
 Darwin, Charles
 Descartes, René
 Détente
 Dutch East India Company
 Dutch Empire
 Early Modern World
 Eastern Europe
 Elizabeth I
 Enlightenment, The
 Eurocentrism
 Europe
 European Union
 Expansion, European
 Fascism
 Feudalism
 French Empire
 Galileo Galilei
 Gama, Vasco da
 German Empire
 Grand Tour
 Greece, Ancient
 Gregory VII
 Guilds
 Hanseatic League
 Henry the Navigator



Herodotus
 Hitler, Adolf
 Holocaust
 Homer
 Iberian Trading Companies
 Indo-European Migration
 Interwar Years (1918–1939)
 Isabella I
 Joan of Arc
 Lenin, Vladimir
 Leonardo da Vinci
 Locke, John
 Luther, Martin
 Macedonian Empire
 Machiavelli, Niccolo
 Magellan, Ferdinand
 Manorialism
 Marx, Karl
 Mercantilism
 Napoleon
 Napoleonic Empire
 Newton, Isaac
 North Atlantic Treaty Organization
 Orthodoxy, Christian
 Ottoman Empire
 Parliamentarianism
 Peter the Great
 Plato
 Polo, Marco
 Portuguese Empire
 Protestantism
 Raynal, Abbé Guillaume
 Renaissance
 Revolution—France
 Revolution—Russia
 Roman Empire
 Russian-Soviet Empire
 Smith, Adam
 Socrates
 Spanish Empire
 Stalin, Joseph
 Thomas Aquinas, St.

Thucydides
 Trading Patterns, Ancient
 European
 Trading Patterns, Eastern
 European
 Trading Patterns, Mediterranean
 Treaty of Versailles
 Urban II
 Victoria
 Viking Society
 Warfare—Europe
 Warsaw Pact
 World War I
 World War II

Arts and Literature

Art—Africa
 Art—Ancient Greece and Rome
 Art—Central Asia
 Art—East Asia
 Art—Europe
 Art—Native North America
 Art—Overview
 Art—Russia
 Art—South Asia
 Art—Southeast Asia
 Art—West Asia
 Art, Paleolithic
 Bullroarers
 Child, Lydia
 Creation Myths
 Dance and Drill
 Dictionaries and Encyclopedias
 Enlightenment, The
 Letters and Correspondence
 Leonardo da Vinci
 Libraries
 Literature and Women
 Museums
 Music—Genres
 Music and Political Protest

Renaissance
 Writing Systems and Materials
 Writing World History
 Yijing

Biography

Abraham
 Akbar
 Alexander the Great
 al-Khwarizmi
 al-Razi
 Aristotle
 Asoka
 Augustine, St.
 Aurangzeb
 Bolívar, Simón
 Caesar, Augustus
 Caesar, Julius
 Catherine the Great
 Charlemagne
 Charles V
 Child, Lydia
 Churchill, Winston
 Columbus, Christopher
 Confucius
 Constantine the Great
 Cyrus the Great
 Darwin, Charles
 Descartes, Rene
 Du Bois, W. E. B.
 Einstein, Albert
 Elizabeth I
 Galileo Galilei
 Gama, Vasco da
 Gandhi, Mohandas
 Genghis Khan
 Gregory VII
 Guevara, Che
 Hammurabi
 Han Wudi
 Harun ar-Rashid
 Hatshepsut



Henry the Navigator
 Herodotus
 Hitler, Adolf
 Ho Chi Minh
 Homer
 Ibn Battuta
 Ibn Khaldun
 Ibn Sina
 Isabella I
 Jefferson, Thomas
 Jesus
 Joan of Arc
 Justinian I
 Kamehameha I
 Kangxi Emperor
 Kenyatta, Jomo
 King, Martin Luther, Jr.
 Laozi
 Lenin, Vladimir
 Leonardo da Vinci
 Lincoln, Abraham
 Locke, John
 Luther, Martin
 Machiavelli, Niccolo
 Magellan, Ferdinand
 Mahavira
 Mansa Musa
 Mao Zedong
 Marx, Karl
 Mehmed II
 Mencius
 Miranda, Francisco de
 Moses
 Motecuhzoma II
 Muhammad
 Napoleon
 Newton, Isaac
 Nkrumah, Kwame
 Osman I
 Paul, St.
 Peter the Great
 Plato

Polo, Marco
 Qin Shi Huangdi
 Ramses II
 Raynal, Abbé Guillaume
 Ricci, Matteo
 Roosevelt, Eleanor
 Roosevelt, Franklin Delano
 Rumi
 Saladin
 Senghor, Léopold
 Shaka Zulu
 Siddhartha Gautama
 Sima Qian
 Smith, Adam
 Socrates
 Stalin, Joseph
 Sui Wendi
 Sui Yangdi
 Süleyman
 Sun Yat-sen
 Tang Taizong
 Thomas Aquinas, St.
 Thucydides
 Timur
 Túpac Amaru
 Tutu, Desmond
 ‘Umar ibn al-Khattab
 Urban II
 Victoria
 Yongle Emperor
 Zheng He
 Zhu Yuanzhang

**Commerce—
 Organizations
 and Institutions**

British East India Company
 Dutch East India Company
 Guilds
 Hanseatic League
 Hong Merchants
 Hudson’s Bay Company

Iberian Trading Companies
 Multinational Corporations

**Commerce—
 Systems and
 Patterns**

Barter
 Capitalism
 Columbian Exchange
 Economic Growth, Intensive and
 Extensive
 General Agreement on Tariffs and
 Trade
 International Monetary Systems
 Labor Systems, Coercive
 Mercantilism
 Money
 Piracy
 Property Rights and Contracts
 Silk Roads
 Slave Trades
 Trade Cycles
 Trading Patterns, Ancient
 American
 Trading Patterns, Ancient
 European
 Trading Patterns, China Seas
 Trading Patterns, Eastern
 European
 Trading Patterns, Indian Ocean
 Trading Patterns, Mediterranean
 Trading Patterns, Mesoamerican
 Trading Patterns, Pacific
 Trading Patterns, Trans-Saharan
 World System Theory

**Commerce—
 Trade Goods
 and Products**

Alcohol
 Cereals
 Coal

Coffee
 Drugs
 Food
 Fur Trade
 Glass
 Gold and Silver
 Gum Arabic
 Natural Gas
 Oil
 Paper
 Plastics
 Porcelain
 Rubber
 Salt
 Slave Trades
 Spice Trade
 Sugar
 Tea
 Textiles
 Timber

Communication

Communication—Overview
 Dictionaries and Encyclopedias
 Esperanto
 Language, Classification of
 Language, Standardization of
 Letters and Correspondence
 Libraries
 Mass Media
 Radio
 Telegraph and Telephone
 Writing Systems and Materials

**Conflict and
 Peace Making—
 Diplomacy and
 Peace Making**

Balance of Power
 Berlin Conference
 Cold War
 Congress of Vienna

Containment
 Détente
 Diplomacy
 Interwar Years (1918–1939)
 Nonviolence
 Peace Making in the Modern Era
 Peace Projects
 Treaty of Versailles

**Conflict and
 Peace Making—
 War and Conflict**

Cold War
 Crusades, The
 Firearms
 Genocide
 Holocaust
 Logistics
 Military Engineering
 Military Strategy and Tactics
 Military Training and
 Discipline
 Religion and War
 Revolution—China
 Revolution—Cuba
 Revolution—France
 Revolution—Haiti
 Revolution—Iran
 Revolution—Mexico
 Revolution—Russia
 Revolution—United States
 Revolutions, Communist
 War and Peace—Overview
 Warfare—Africa
 Warfare—China
 Warfare—Europe
 Warfare—Islamic World
 Warfare—Japan and Korea
 Warfare—Post-Columbian
 Latin America
 Warfare—Post-Columbian
 North America

Warfare—Pre-Columbian Meso-
 america and North America
 Warfare—Pre-Columbian
 South America
 Warfare—South Asia
 Warfare—Southeast Asia
 Warfare—Steppe Nomads
 Warfare, Air
 Warfare, Comparative
 Warfare, Land
 Warfare, Naval
 Warfare, Origins of
 World War I
 World War II

**Cultural Contact
 and Relations**

Colonialism
 Comparative Borders and
 Frontiers
 Decolonization
 Diasporas
 Displaced Populations,
 Typology of
 Ethnic Nationalism
 Ethnicity
 Ethnocentrism
 Eurocentrism
 Expansion, European
 Expeditions, Scientific
 Exploration, Chinese
 Exploration, Space
 Grand Tour
 Indigenous Peoples
 Interregional Networks
 Maritime History
 Missionaries
 Navigation
 Orientalism
 Pilgrimage
 Race and Racism
 Slave Trades

Social Darwinism
 Tourism
 Travel Guides
 World System Theory

Daily Life

Adolescence
 Age Stratification
 Childhood
 Dress
 Education
 Festivals
 Games
 Initiation and Rites of Passage
 Kinship
 Leisure
 Marriage and Family
 Sex and Sexuality
 Sports
 Textiles

Disciplines and Fields of Study

Anthropology
 Archaeology
 Cartography
 Comparative Ethnology
 Comparative History
 Genetics
 Museums
 Paleoanthropology
 Social History
 Social Sciences
 Sociology
 Women’s and Gender History

Environment and Ecology

Anthroposphere
 Biological Exchanges
 Climate Change
 Deforestation

Desertification
 Earthquakes
 Energy
 Erosion
 Extinctions
 Famine
 Fire
 Green or Environmental
 Movements
 Green Revolution
 Nature
 Time, Conceptions of
 Water
 Water Management

Eras, Empires, States, and Societies

Africa, Colonial
 Africa, Postcolonial
 Aksum
 American Empire
 Andean States
 Assyrian Empire
 Austro-Hungarian Empire
 Aztec Empire
 Babylon
 Benin
 British Empire
 Byzantine Empire
 Celts
 China
 Delhi Sultanate
 Dutch Empire
 Early Modern World
 Egypt—State Formation
 Egypt, Ancient
 French Empire
 German Empire
 Greece, Ancient
 Harappan State and Indus
 Civilization

Hausa States
 Inca Empire
 Islamic World
 Japanese Empire
 Kanem-Bornu
 Khmer Kingdom
 Kongo
 Kushan Empire
 Macedonian Empire
 Mali
 Meroë
 Mesoamerica
 Mesopotamia
 Mississippian Culture
 Mongol Empire
 Mughal Empire
 Napoleonic Empire
 Nubians
 Ottoman Empire
 Persian Empire
 Portuguese Empire
 Roman Empire
 Russian-Soviet Empire
 Sasanian Empire
 Sokoto Caliphate
 Songhai
 Spanish Empire
 Srivijaya
 State Societies, Emergence of
 State, The
 Steppe Confederations
 Sumerian Society
 Turkic Empire
 Ugarit
 Viking Society
 Wagadu Empire
 Zimbabwe, Great

Evolution

Extinctions
 Foraging (Paleolithic) Era (please
 see *This Fleeting World*)



Human Evolution—Overview
 Paleoanthropology
 Universe, Origins of

**Government,
 Politics, and Law**

Absolutism, European
 Arab Caliphates
 Bands, Tribes, Chiefdoms, and States
 Citizenship
 Civil Disobedience
 Civil Law
 Communism and Socialism
 Confucianism
 Contract Law
 Democracy, Constitutional
 Fascism
 Feudalism
 Forms of Government—Overview
 Global Commons
 Global Imperialism and Gender
 Human Rights
 Imperialism
 International Law
 Islamic Law
 Liberalism
 Manorialism
 Nationalism
 Natural Law
 Parliamentaryism
 Religion and Government
 Sacred Law
 Secularism
 Social Welfare
 Utopia
 Zionism

**Health and
 Disease**

AIDS
 Biological Exchanges
 Cinchona

Disease and Nutrition
 Diseases—Overview
 Diseases, Animal
 Diseases, Plant
 Malaria
 Quinine

**International
 and Regional
 Organizations**

African Union
 Arab League
 Association of Southeast Asian
 Nations
 Comintern
 European Union
 International Court of Justice
 International Criminal Court
 International Organizations—
 Overview
 League of Nations
 North Atlantic Treaty
 Organization
 Organization of American States
 Red Cross and Red Crescent
 Movement
 United Nations
 Warsaw Pact

Migration

Asian Migrations
 Diasporas
 Displaced Populations,
 Typology of
 Equatorial and Southern Africa,
 4000 BCE–1100 CE
 Expansion, European
 Global Migration in Modern
 Times
 Indo-European Migration
 Migrations
 Pacific, Settlement of

Pastoral Nomadic Societies
 Urbanization

Periodization

Agrarian Era (please see *This
 Fleeting World*)
 Civilization, Barbarism, Savagery
 Foraging (Paleolithic) Era (please
 see *This Fleeting World*)
 Long Cycles
 Modern Era (please see *This
 Fleeting World*)
 Periodization, Conceptions of
 Periodization—Overview

**Philosophy,
 Thought,
 and Ideas**

Anthroposphere
 Civilization, Barbarism, Savagery
 Confucianism
 Culture
 Freedom
 Modernity
 Orientalism
 Political Thought
 Postcolonial Analysis
 Postmodernism
 Progress
 Western Civilization
 World Maps, Chinese

Population

Age Stratification
 Carrying Capacity
 Contraception and Birth Control
 Population
 Population Growth as Engine
 of History
 Urbanization
 World Cities in History—
 Overview

Religion and Belief Systems

African Religions
 African-American and Caribbean Religions
 Animism
 Babi and Baha'i
 Buddhism
 Catholicism, Roman
 Chinese Popular Religion
 Creation Myths
 Daoism
 Ecumenicism
 Hinduism
 Islam
 Jainism
 Judaism
 Latter-day Saints
 Manichaeism
 Millennialism
 Missionaries
 Mysticism
 Native American Religions
 Orthodoxy, Christian
 Pentecostalism
 Pilgrimage
 Protestantism
 Religion—Overview
 Religion and Government
 Religion and War
 Religious Freedom
 Religious Fundamentalism
 Religious Syncretism
 Sacred Law
 Shamanism
 Shinto
 Sikhism
 Totemism
 Zionism
 Zoroastrianism

Research Methods

Cultural and Geographic Areas
 Cultural Ecology
 Dating Methods
 Decipherment of Ancient Scripts
 Oral History
 Periodization, Conceptions of
 Postcolonial Analysis
 Writing World History

Social and Political Movements

Apartheid in South Africa
 Consumerism
 Contraception and Birth Control
 Decolonization
 Ethnic Nationalism
 Gay and Lesbian Rights Movement
 Green or Environmental Movements
 Human Rights
 Indigenous Peoples Movements
 Labor Union Movements
 Pan-Africanism
 Religious Fundamentalism
 Revolution—China
 Revolution—Cuba
 Revolution—France
 Revolution—Haiti
 Revolution—Iran
 Revolution—Mexico
 Revolution—Russia
 Revolution—United States
 Revolutions, Communist
 Women's Emancipation Movements
 Women's Reproductive Rights Movements
 Women's Suffrage Movements

Technology and Science

Alchemy
 Architecture
 Computer
 Electricity
 Energy
 Enlightenment, The
 Expeditions, Scientific
 Industrial Technologies
 Information Societies
 Mathematics
 Metallurgy
 Paper
 Renaissance
 Science—Overview
 Scientific Instruments
 Scientific Revolution
 Secondary-Products Revolution
 Technology—Overview
 Water Management

Themes—Models and Processes

Empire
 Engines of History
 First, Second, Third, Fourth Worlds
 Globalization
 Long Cycles
 Matriarchy and Patriarchy
 Nation-State
 Production and Reproduction
 State, The
 World System Theory

Themes—Places

Africa
 Afro-Eurasia

Asia
 Eastern Europe
 Europe
 Frontiers
 Geographic Constructions
 Inner Eurasia

Transportation

Airplane
 Automobile
 Caravan
 Navigation
 Railroad
 Sailing Ships
 Transportation—
 Overview

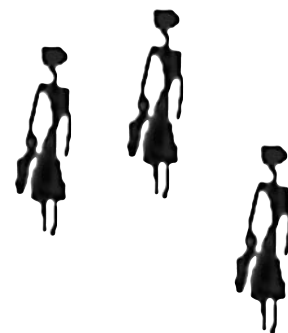
Ways of Living

Agricultural Societies
 Foraging Societies, Contemporary
 Horticultural Societies
 Indigenous Peoples
 Information Societies
 Pastoral Nomadic Societies

Women and Gender

AIDS
 Childhood
 Contraception and Birth Control
 Dress
 Gay and Lesbian Rights
 Movement

Global Imperialism and
 Gender
 Human Rights
 Initiation and Rites of Passage
 Kinship
 Letters and Correspondence
 Literature and Women
 Marriage and Family
 Matriarchy and Patriarchy
 Sex and Sexuality
 Women's and Gender History
 Women's Emancipation
 Movements
 Women's Reproductive Rights
 Movements
 Women's Suffrage Movements



Maps

HEADWORD	MAP TITLE
AGRARIAN ERA	<i>THIS FLEETING WORLD: Distribution of Agriculture by 500 BCE</i>
AGRARIAN ERA	<i>THIS FLEETING WORLD: Early Farming Communities in Southwest Asia and Egypt</i>
AFRICA	<i>Africa in 2004</i>
AFRICA, COLONIAL	<i>European Colonization of Africa as of 1914</i>
AKSUM	<i>Aksum in Modern Northeast Africa</i>
AZTEC EMPIRE	<i>Aztec Empire in 1520 CE</i>
BENIN	<i>Benin in Modern West Africa</i>
BUDDHISM	<i>Spread of Buddhism 500 BCE–600 CE</i>
BRITISH EMPIRE	<i>English Voyages of Exploration 1497–1610</i>
BYZANTINE EMPIRE	<i>Byzantine Empire at 565 CE</i>
CHINA	<i>Han Dynasty 202 BCE–220 CE</i>
CRUSADES	<i>The First Crusade in 1096</i>
EASTERN EUROPE	<i>Eastern Europe in 2004</i>
EGYPT, ANCIENT	<i>Ancient Egypt in 1000 BCE</i>
EUROPE	<i>Europe in 2004</i>
EUROPE	<i>Italian City-States' Trade Routes</i>
EUROPE	<i>Major European Trade Routes from 1280–1500</i>
FRENCH EMPIRE	<i>French Voyages of Exploration</i>
GREECE, ANCIENT	<i>Greece and Its Colonies in 500 BCE</i>
HANSEATIC LEAGUE	<i>Hanseatic League Trade Routes</i>
HARRAPAN STATE AND INDUS CIVILIZATION	<i>Greater Indus Valley</i>
HAUSA STATES	<i>Hausa States Superimposed on Modern West Africa</i>
HUMAN EVOLUTION	<i>Important Sites in Africa Associated with Human Evolution</i>
INCA EMPIRE	<i>Inca Empire in 1525 CE</i>
INDUSTRIAL TECHNOLOGIES	<i>Centers of European Industrialization in 1850</i>

HEADWORD	MAP TITLE
INNER EURASIA	<i>Inner Eurasia in 2004</i>
ISLAMIC WORLD	<i>Trade Routes of the Islamic World in 1000 CE</i>
JAPANESE EMPIRE	<i>Japanese Empire in 1942</i>
KANEM-BORNU	<i>Kanem-Bornu in Modern North Central Africa</i>
KHMER EMPIRE	<i>Khmer Empire in Modern Southeast Asia</i>
KONGO	<i>Kongo in Modern West Africa</i>
MACEDONIAN EMPIRE	<i>Alexander the Great's Empire—334–323 BCE</i>
MALI	<i>Mali in West Africa</i>
MEROË	<i>Meroë in Modern Northeast Africa</i>
MESOAMERICA	<i>City States of Mesoamerica</i>
MESOPOTAMIA	<i>Mesopotamia in 2500 BCE</i>
MISSISSIPPIAN CULTURES	<i>Cahokia and Satellite Communities c. 1050–1200 CE</i>
MONGOL EMPIRE	<i>Mongol Empire in the Late Thirteenth Century</i>
NAPOLEONIC EMPIRE	<i>Napoleonic Empire in 1812</i>
NUBIANS	<i>Nubia in Modern Northeast Africa</i>
OTTOMAN EMPIRE	<i>Ottoman Empire in 1566</i>
PACIFIC, SETTLEMENT OF	<i>Islands of the Pacific</i>
PERSIAN EMPIRE	<i>The Persian Empire in 500 BCE</i>
PORTUGUESE EMPIRE	<i>Portuguese Voyages of Exploration</i>
PROTESTANTISM	<i>Protestant Region of Europe c. 1600 CE</i>
ROMAN EMPIRE	<i>Roman Empire in 117 CE</i>
RUSSIAN EMPIRE	<i>Kievan Russia in 900 CE</i>
RUSSIAN EMPIRE	<i>Russian Empire in 1796</i>
SILK ROAD	<i>Silk Roads From China to Europe</i>
SLAVE TRADES	<i>Atlantic Slave Trade</i>
SOKOTO CALIPHATE	<i>Sokoto Caliphate in Modern West Africa</i>
SONGHAI	<i>Songhay (Songhai) in Modern West Africa</i>
SPANISH EMPIRE	<i>Spanish Voyages of Exploration</i>
STATE, THE	<i>Locations of Major Classical States</i>
SUMERIAN SOCIETY	<i>Sumer</i>
URBANIZATION	<i>Largest Urban Areas in 2004</i>
WAGADU EMPIRE	<i>Wagadu Empire in Modern West Africa</i>
WARFARE—STEPPE NOMADS	<i>Steppe Nomad Invasion and Migration Routes</i>
ZIMBABWE, GREAT	<i>Great Zimbabwe in Modern Southeast Africa</i>

Contributors

Adams, Paul
Shippensburg University
Production and Reproduction

Adas, Michael
Rutgers University
Race and Racism
Social Darwinism

Afsaruddin, Asma
University of Notre Dame
Islamic World
Rumi

Agoston, Gabor
Georgetown University
Warfare—Islamic World

Ahluwalia, Sanjam
Northern Arizona University
Contraception and Birth Control

Alexander, William H.
Norfolk State University
Raynal, Abbé Guillaume

Ali, Omar H.
Towson University, Baltimore
Labor Union Movements

Anderson, Atholl
Australian National University
Pacific, Settlement of

Andrea, A. J.
University of Vermont
Byzantine Empire
Crusades, The

Andressen, Curtis A.
Flinders University
Association of Southeast Asian
Nations

Arkenberg, Jerome
California State University,
Fullerton
Constantine the Great

Arora, Mandakini
Overseas Family School, Singapore
Asoka

Austen, Ralph A.
University of Chicago
Trading Patterns, Trans-Saharan

Baer, Hans A.
University of Arkansas
Pentecostalism

Bagchi, Kaushik
Goucher College
Ethnocentrism

Bainbridge, William Sims
National Science Foundation
Computer

Banerji, Debashish
University of California,
Los Angeles
Art—South Asia

Bard, Mitchell G.
American-Israeli Cooperative
Enterprise
Holocaust

Barfield, Thomas J.
Boston University
Pastoral Nomadic Societies

Barkin, J. Samuel
University of Florida
International Organizations—
Overview

Bartlett, Kenneth R.
University of Toronto
Grand Tour
Leonardo da Vinci
Renaissance

Beach, Timothy
Georgetown University
Erosion

Beasley, Edward
San Diego State University
British Empire



Beck, Roger B.
Eastern Illinois University
Apartheid in South Africa
Missionaries
Tutu, Desmond

Benjamin, Craig
Grand Valley State University
Art—Central Asia
Kushan Empire

Berdan, Frances
California State University, San Bernardino
Aztec Empire
Oral History
Trading Patterns, Mesoamerican

Berg, Herbert
University of North Carolina, Wilmington
Islamic Law

Berglund, Bruce
Calvin College
Eastern Europe

Berry, Brian
University of Texas, Dallas
Urbanization

Biltoft, Carolyn N.
Princeton University
Interwar Years (1918–1939)

Blitz, Mark
Claremont-McKenna College
Forms of Government—Overview

Blockmans, Wim P.
Netherlands Institute for Advanced Study
Charles V

Blom, Ida
University of Bergen
Women's and Gender History

Boeck, Brian J.
DePaul University
Comparative Borders and Frontiers

Bouchard, Carl
Université du Québec à Montréal
Peace Projects

Bowman, Sally
Oregon State University
Age Stratification

Breiner, David
Philadelphia University
Architecture

Broers, Michael
Oxford University
Napoleonic Empire

Brooks, Christopher A.
Virginia Commonwealth University
Africa, Postcolonial

Broom, John T.
Park University and Metropolitan Community Colleges
Warfare—Post-Columbian North America

Broude, Gwen J.
Vassar College
Adolescence
Initiation and Rites of Passage

Burgh, Theodore
Notre Dame University
Archaeology
Moses
Ramses II

Burstein, Stanley
California State University, Los Angeles

Aksum
Alexander the Great
Herodotus
Macedonian Empire
Meroë

Buschmann, Rainer F.
California State University, Channel Islands
German Empire
Museums

Buzzanco, Robert
University of Houston
American Empire

Campbell, Gary
Michigan Technological University
Gold and Silver

Capet, Antoine
Université de Rouen, France
Comintern
League of Nations
North Atlantic Treaty Organization

Carrillo, Elisa A.
Marymount College of Fordham University
Augustine, St.
Catholicism, Roman
Galileo Galilei
Joan of Arc
Machiavelli, Niccolo

Carton, Adrian
Macquarie University
Food

- Castleman, Bruce A.
San Diego State University
Warfare—Post-Columbian Latin America
- Catlos, Brian A.
University of California, Santa Cruz
Harun al-Rashid
Saladin
‘Umar ibn al-Khattab
- Cavalli-Sforza, Luigi Luca
Stanford University
Genetics
- Centeno, Miguel A.
Princeton University
Globalization
Interregional Networks
Revolution—Cuba
- Cernea, Michael M.
World Bank
Displaced Populations, Typology of
- Chambers, Erve
University of Maryland
Tourism
- Chan, Wellington K.
Occidental College
Hong Merchants
- Chapple, Chris
Loyola Marymount University
Jainism
- Charlston, Jeffery
U.S. Army Center of Military History
Military Strategy and Tactics
- Chew, Sing C.
Humboldt State University
Timber
- Chick, Garry
Pennsylvania State University
Games
Leisure
- Christian, David
San Diego State University
Agrarian Era
Alcohol
Creation Myths
Foraging (Paleolithic) Era
Inner Eurasia
Modern Era
Periodization—Overview
Population Growth as Engine of History
Science—Overview
Silk Roads
Steppe Confederations
Universe, Origins of
- Cioc, Mark
University of California, Santa Cruz
Railroad
- Cioffi-Revilla, Claudio
George Mason University
Warfare, Origins of
- Clossey, Luke
Simon Fraser University
Early Modern World
Mathematics
Portuguese Empire
- Cohen, Mark Nathan
State University of New York, Plattsburgh
Carrying Capacity
Disease and Nutrition
- Coleman, Simon
University of Sussex
Pilgrimage
- Colli, Andrea
Università Bocconi, Italy
Multinational Corporations
- Collinson, David
Lancaster University
Elizabeth I
- Collinson, Margaret
Lancaster University
Elizabeth I
- Conrad, David
State University of New York, Oswego
Mali
Songhai
- Conrad, Stephen A.
Indiana University
Citizenship
- Courtwright, David T.
University of North Florida
Drugs
- Croizier, Ralph C.
University of Victoria
Confucius
Qin Shi Huangdi
Revolution—China
- Crosby, Alfred W.
University of Texas, Austin
Columbian Exchange
- Cumo, Christopher M.
Independent Scholar
Diseases, Plant
Gama, Vasco da
Magellan, Ferdinand
- Curran, Cynthia
Saint John’s University, College of Saint Benedict
Women’s Emancipation Movements

Curtis, Kenneth R.
California State University, Long
Beach

Africa, Colonial

Daniels, Peter T.
Independent Scholar
Decipherment of Ancient Scripts

Darwin, John G.
University of Oxford
Decolonization

Daryaei, Touraj
California State University,
Fullerton

Cyrus the Great
Persian Empire
Sasanian Empire
Zoroastrianism

Davis, Derek H.
Baylor University
Religious Freedom

Davis, Jr., Donald G.
University of Texas at Austin
Libraries

Davis, Stacy
University of Notre Dame
Paul, St.

DenBeste, Michelle
California State University, Fresno
Cold War

Deng, Kent G.
London School of Economics and
Political Science
Exploration, Chinese

Denny, Walter B.
University of Massachusetts,
Amherst
Art—West Asia

Dickson, D. Bruce
Texas A&M University
Extinctions

Dieu, Nguyen T.
Temple University
Ho Chi Minh

Dimand, Robert W.
Brock University
International Monetary Systems
Trade Cycles

Dobbs, Charles M.
Iowa State University
Organization of American States
Warfare—China
Warfare—Japan and Korea
World War II

Doerr, Paul W.
Acadia University
Congress of Vienna
Containment
Détente
Diplomacy

Doumanis, Nick
University of New South Wales
Trading Patterns, Mediterranean

Duara, Prasenjit
University of Chicago
Nation-State

Dudley, Wade G.
East Carolina University
Warfare, Naval

Duncan, Carol B.
Wilfrid Laurier University
Matriarchy and Patriarchy

Dunn, Ross E.
San Diego State University
Afro-Eurasia
Ibn Battuta

Eagleton, Catherine
Cambridge University
Scientific Instruments

Ebbesen, Martha A.
Instituto Tecnológico y de Estudios
Superiores de Monterrey
British East India Company
Hudson's Bay Company
Smith, Adam

Ehret, Christopher
University of California, Los
Angeles
Equatorial and Southern Africa,
4000 BCE–1100 CE
Nubians

Emerson, Thomas
University of Illinois, Urbana-
Champaign
Mississippian Culture

Emmer, Pieter C.
University of Leiden
Dutch Empire

Erickson, Patricia E.
Canisius College
Civil Disobedience

Ezra, Kate
Columbia College, Chicago
Art—Africa

Fahey, David M.
Miami University
Churchill, Winston
Newton, Isaac

Faruqui, Munis D.
University of Dayton
Akbar
Aurangzeb



Featherstone, Lisa
Macquarie University
Marriage and Family

Feder, Kenneth
Central Connecticut State
University
Dating Methods

Feldman, Jerome
Hawaii Pacific University
Art—Southeast Asia

Feldstein, Lori A.
Independent Scholar
Catherine the Great

Finlay, Robert
University of Arkansas
Porcelain
Yongle Emperor
Zheng He

Firestone, Reuven
Hebrew Union College
Abraham
Judaism

Fitch, Nancy
California State University at
Fullerton
Revolution—Haiti

Flynn, Dennis O.
University of the Pacific
Trading Patterns, Pacific

Ford, Charles Howard
Norfolk State University
Absolutism, European
Slave Trades

Frank, Andre Gunder
Northeastern University
Eurocentrism
Long Cycles

Gaastra, Femme
Leiden University
Spice Trade

Gabaccia, Donna R.
University of Pittsburgh
Diasporas
Migrations

Gelzer, Christian
NASA Dryden Flight Research
Center
Airplane

Georg, Stefan
University of Leiden
Language, Classification of
Language, Standardization of

Gillis, John
Rutgers University
Europe

Gilson, Tom
College of Charleston
Dictionaries and Encyclopedias

Giraldez, Arturo
Independent Scholar
Trading Patterns, Pacific

Glazier, Stephen D.
University of Nebraska, Lincoln
African-American and Caribbean
Religions
Du Bois, W. E. B.
Religious Syncretism

Golden, Peter
Rutgers University, Newark
Turkic Empire

Goldstein, Eli
Bar-Ilan University, Israel
Natural Gas

Goudie, Andrew S.
Oxford University
Desertification

Goudsblom, Johan
University of Amsterdam
Anthroposphere
Fire

Grim, John A.
Bucknell University
Native American Religions

Hagelberg, Gerhard
Independent Scholar
Sugar

Hagens, Bethe
Union Institute and University
Bullroarers

Halper, Donna L.
Emerson College
Arab League
Gay and Lesbian Rights Movement
Mass Media

Hammerl, Christa
Central Institute for Meteorology
and Geodynamics
Earthquakes

Hardy, Grant
University of North Carolina,
Asheville
Sima Qian

Harpham, Edward J.
University of Texas, Dallas
Locke, John

Hart, John M.
University of Houston
Revolution—Mexico



Hassig, Ross
Tucson, Arizona
Warfare—Pre-Columbian Meso-america and North America

Headrick, Daniel R.
Roosevelt University
Communication—Overview
Technology—Overview
Telegraph and Telephone

Hemmerle, Oliver Benjamin
Chemnitz University, Germany
Warfare—Europe

Hornborg, Alf
Lund University, Sweden
Cultural Ecology
Warfare—Pre-Columbian South America

Horowitz, Richard
California State University,
Northridge
Sun Yat-sen

Howell, Chris
Walla Walla Community College
Capitalism
Warfare, Comparative
Warfare, Land

Huehnergard, John
Harvard University
Hammurabi

Hughes, J. Donald
University of Denver
Green or Environmental
Movements

Hughes, Lindsey
School of Slavonic and East
European Studies
Art—Russia
Peter the Great

Hughes-Warrington, Marnie
Macquarie University
Postmodernism
Writing World History

Huiza, Claudia M.
National University
Literature and Women

Hunt, Robert C.
Brandeis University
Water Management

Hwa, Lily
University of St. Thomas,
Minnesota
Han Wudi
Laozi
Tang Taizong

Jennings, Justin
University of California, Santa
Barbara
Andean States
Inca Empire

Johnson, Ann
University of South Carolina
Automobile

Johnson, Denise R.
Southern Illinois University,
Carbondale
Women's Suffrage Movements

Johnson-Roullier, Cyraina
Notre Dame University
Modernity

Jones, Richard A.
Independent Scholar
Darwin, Charles

Joslyn, Mauriel
Independent Scholar
Warfare, Air

Joyner, Christopher C.
Georgetown University
General Agreement on Tariffs and
Trade
Global Commons
International Court of Justice

Kaser, Michael
Oxford University
Trading Patterns, Eastern European

Kea, Ray A.
University of California, Riverside
Kanem-Bornu
Wagadu Empire

Keegan, William F.
Florida Museum of Natural History
Horticultural Societies

Kellman, Jordan
University of Louisiana, Lafayette
Expeditions, Scientific
Sailing Ships

Kennedy, Dane K.
George Washington University
Empire

Kerschberg, Benjamin S.
Berkshire Publishing Group
Ibn Sina

Khan, Abdul-Karim
University of Hawaii, Leeward
al-Khwarizmi
Arab Caliphates
Muhammad

Kimball, Kathleen I.
Independent Scholar
Art—Overview

Klenbort, Daniel
Morehouse College
Social Sciences

- Klostermaier, Klaus
University of Manitoba
Hinduism
- Koehler, Christiana
Macquarie University
Egypt—State Formation
Hatshepsut
- Kwok, Daniel W. Y.
University of Hawaii
Confucianism
- Laberge, Martin
University of Montreal, Northside
College
Peace Making in the Modern Era
- Laird, Peter F.
Independent Scholar
Shamanism
- Lambden, Stephen
Ohio University
Babi and Baha'i
- Langer, Erick D.
Georgetown University
Frontiers
Indigenous Peoples
Indigenous Peoples Movements
Labor Systems, Coercive
World System Theory
- LaPlaca, Jaelyn A.
Kent State University
Education
Social Welfare
- Lauzon, Matthew J.
University of Hawaii, Manoa
Enlightenment, The
- Lazich, Michael C.
Buffalo State College
Chinese Popular Religion
- Leadbetter, Bill
Edith Cowan University
Aristotle
Genocide
Jesus
Justinian I
Plato
Socrates
Trading Patterns, Ancient European
- Leaf, Murray J.
University of Texas, Dallas
Agricultural Societies
- Lefebure, Leo
Fordham University
Siddhartha Gautama
- Levinson, David
Berkshire Publishing Group
Colonialism
Comparative Ethnology
Foraging Societies, Contemporary
Mesoamerica
- Lewis, Frank D.
Queen's University
Fur Trade
- Lewis, James G.
Durham, North Carolina
Einstein, Albert
King, Martin Luther, Jr.
Lenin, Vladimir Ilich
Roosevelt, Eleanor
Roosevelt, Franklin Delano
- Lewis, Martin
Stanford University
Cartography
Cultural and Geographic Areas
Geographic Constructions
- Lockard, Craig A.
University of Wisconsin, Green Bay
Asian Migrations
Khmer Kingdom
Srivijaya
- Long, Thomas L.
Thomas Nelson Community
College
AIDS
Periodization, Conceptions of
Utopia
- Lopez, Maritere
California State University, Fresno
Daoism
- Low, Michael C.
Independent Scholar
al-Razi
Ibn Khaldun
Mansa Musa
- Lyons, John F.
Joliet Junior College
Jefferson, Thomas
- Macfarlane, Alan
University of Cambridge
Glass
Tea
- Mahdavi, Farid
San Diego State University
Revolution—Iran
- Mahoney, Justin
Vassar College
Property Rights and Contracts
- Mallory, J. P.
Queen's University
Indo-European Migration

- Markham, J. David
International Napoleonic Society
Caesar, Augustus
Caesar, Julius
Napoleon
- Márquez, Carlos E.
Independent Scholar
Gregory VII
Isabella I
Urban II
- Martin, Dorothea
Appalachian State University
Mao Zedong
- Martin, Eric L.
Lewis and Clark State College
Guevara, Che
Nkrumah, Kwame
- Marty, Martin E.
University of Chicago
Protestantism
Religion—Overview
Religious Fundamentalism
- May, Timothy M.
North Georgia College and State
University
Genghis Khan
Mehmed II
Mongol Empire
Osman I
Timur
- McCallon, Mark
Abilene Christian University
Zionism
- McCarthy, Joseph M.
Suffolk University
Logistics
- McChesney, Lea S.
Independent Scholar
Art—Native North America
- McComb, David G.
Colorado State University
Sports
- McKeown, Adam M.
Columbia University
Global Migration in Modern Times
- McNally, Mark
University of Hawaii
Shinto
- McNeill, J. R.
Georgetown University
Biological Exchanges
- McNeill, William H.
University of Chicago
Animism
Dance and Drill
Diseases—Overview
Engines of History
Greece, Ancient
Population
Progress
Salt
Transportation—Overview
Western Civilization
- Mears, John A.
Southern Methodist University
Austro-Hungarian Empire
Human Evolution—Overview
- Mennell, Stephen
University College, Dublin
Sociology
- Michael, Bernardo A.
Messiah College
Culture
Postcolonial Analysis
- Mishra, Patit Paban
Sambalpur University
Delhi Sultanate
Mughal Empire
- Mitchell, Dennis J.
Mississippi State University,
Meridian
Victoria
- Modelski, George
University of Washington
World Cities in History—Overview
- Mokyr, Joel
Northwestern University
Industrial Technologies
Information Societies
- Moore, Robert Scott
Indiana University of Pennsylvania
Hanseatic League
Water
- Morillo, Stephen
Wabash College
Charlemagne
Feudalism
Firearms
Manorialism
War and Peace—Overview
Warfare—Steppe Nomads
- Morris, Peter
The Science Museum
Plastics
Rubber
- Morzer Bruyns, Willem F. J.
Nederlands Scheepvaartmuseum
Navigation
- Mossoff, Adam
Michigan State University
Natural Law



Motavalli, Jim
E: The Environmental Magazine
Automobile

Muldoon, James
Brown University
Columbus, Christopher
Expansion, European

Neill, Jeremy H.
Northeastern University
Imperialism

Neumann, Caryn E.
Ohio State University
International Criminal Court

Newton, Douglas
University of Western Sydney
Treaty of Versailles
World War I

Norwood, Vera
University of New Mexico
Nature

Oliver, Paul
University of Huddersfield
Mysticism
Sikhism

Ordonez, Margaret
University of Rhode Island
Textiles

Osterhammel, Juergen
University of Konstanz
Trading Patterns, China Seas

Owens, J. B.
Idaho State University
Spanish Empire

Page, Jr., Hugh R.
University of Notre Dame
Alchemy
Celts
Egypt, Ancient
Esperanto
Sumerian Society
Ugarit
Viking Society
Writing Systems and Materials

Page, Melvin E.
East Tennessee State University
African Union
Kenyatta, Jomo
Sokoto Caliphate
Warfare—Africa

Paine, Lincoln P.
Portland, Maine
Henry the Navigator
Homer
Maritime History
Piracy

Painter, David S.
Georgetown University
Oil

Palmer, Douglas
Emory University
Contract Law
Sacred Law

Parker, Bradley
University of Utah
Assyrian Empire

Paul, Chandrika
Shippensburg University
Women's Reproductive Rights
Movements

Penna, Anthony N.
Northeastern University
Climate Change

Perrins, Robert John
Acadia University
Kangxi Emperor
Mencius
Polo, Marco
Ricci, Matteo
Sui Wendi
Sui Yangdi

Picon, Andres Sanchez
University of Almeria, Spain
Coal

Pierotti, Raymond
University of Kansas
Diseases, Animal

Plant, Ian
Macquarie University
Thucydides

Podany, Amanda H.
California State Polytechnic
University, Pomona
Babylon
Mesopotamia

Pomeranz, Kenneth L.
University of California, Irvine
Economic Growth, Extensive and
Intensive

Poole, Ross
Macquarie University
Nationalism

Poor, Robert J.
University of Minnesota
Art—East Asia

Possehl, Gregory L.
University of Pennsylvania
Museum
Harappan State and Indus
Civilization



Prashad, Vijay
Trinity College
First, Second, Third, Fourth Worlds

Pratt, Dorothy O.
Notre Dame University
Lincoln, Abraham

Quataert, Donald
State University of New York,
Binghamton
Ottoman Empire

Quirin, James A.
Fisk University
Pan-Africanism

Racine, Karen
University of Guelph
Bolívar, Simón
Miranda, Francisco de

Ragan, Elizabeth A.
Salisbury University
Bands, Tribes, Chiefdoms, and
States

Redles, David
Cuyahoga Community College
Fascism

Reeves, Caroline
Williams College
Red Cross and Red Crescent
Movement

Renick, Timothy M.
Georgia State University
Manichaeism
Religion and War

Reynolds, Jonathan
Northern Kentucky University
Africa

Rhodes, Robin F.
University of Notre Dame
Art—Ancient Greece and Rome

Roshwald, Aviel
Georgetown University
Ethnic Nationalism

Ryan, Michael A.
University of Minnesota
Iberian Trading Companies
Travel Guides

Salamone, Frank A.
Iona College
African Religions
Festivals

Hausa States
Music—Genres

Satterfield, George
State University of New York,
Morrisville
Süleyman

Sawan, Douglas
West Roxbury, Massachusetts
Warfare—Southeast Asia

Sayegh, Sharlene S.
California State University, Long
Beach
Letters and Correspondence

Schechter, Ronald
College of William and Mary
Revolution—France

Schmidt, Heike I.
San Diego State University
Kongo
Zimbabwe, Great

Segal, Daniel A.
Pitzer College
Anthropology
Civilization, Barbarism, Savagery

Sethia, Tara
California State Polytechnic
University

Gandhi, Mohandas
Mahavira
Nonviolence

Sewell, Elizabeth A.
Brigham Young University
Latter-day Saints
Religion and Government

Shapiro, Warren
Rutgers University
Kinship
Totemism

Sheedy, Kenneth
Macquarie University
Barter
Money

Sherratt, Andrew
Oxford University
Secondary-Products Revolution

Simonetto, Michele
ISTRESKO, Italy
Cereals
Guilds

Smil, Vaclav
University of Manitoba
Energy

Smith, Jr., Allyne L.
St. Joseph Center
Orthodoxy, Christian

Smith, Michael E.
State University of New York,
Albany
Moteczuhzoma II
Trading Patterns, Ancient
American

- Smith, Richard J.
Rice University
World Maps, Chinese Yijing
- Sneh, Itai Nartzizenfeld
John Jay College of Criminal Justice, CUNY
Balance of Power Civil Law Democracy, Constitutional Parliamentarianism Secularism
- Spongberg, Mary
Macquarie University
Child, Lydia
- Starr, Kristen
Auburn University
Exploration, Space
- Stavig, Ward
University of South Florida
Túpac Amaru
- Stearns, Peter N.
George Mason University
Childhood Consumerism Mercantilism Revolution—United States Social History
- Sterling, Christopher
George Washington University
Radio
- Stillman, Peter G.
Vassar College
Property Rights and Contracts
- Stokes, Gale
Rice University
Warsaw Pact
- Strayer, Robert W.
State University of New York, Brockport
Communism and Socialism Revolution—Russia Revolutions, Communist
- Streets, Heather
Washington State University
Global Imperialism and Gender
- Stremlin, Boris
Independent Scholar
Russian-Soviet Empire
- Stuchtey, Benedikt
German Historical Institute
Orientalism
- Sundaram, Chandar S.
Lingnan University
Warfare—South Asia
- Sutton, John
Macquarie University
Descartes, René
- Svoboda, Jiri
Institute of Archaeology, Czech Republic
Art, Paleolithic
- Tarver, H. Micheal
Arkansas Tech University
Gregory VII Isabella I Urban II
- Tattersall, Ian
American Museum of Natural History
Paleoanthropology
- Templet, Gabby K.
Berkshire Publishing Group
United Nations
- Tent, James F.
University of Alabama, Birmingham
Hitler, Adolf
- Tishken, Joel
Colombus State University
Benin
- Topik, Steven
University of California, Irvine
Coffee
- Tschudin, Peter F.
The Basel Paper Mill, Swiss Museum of Paper
Paper
- Uriarte Ayo, R.
Universidad del Pais Vasco, Italy
Metallurgy
- Van Dyke, Jon
University of Hawaii
Human Rights International Law
- Van Sant, John E.
University of Alabama, Birmingham
Japanese Empire
- Vink, Markus
State University of New York, Fredonia
Dutch East India Company
- Vlahakis, George N.
Independent Scholar
Electricity Scientific Revolution
- Voll, John O.
Georgetown University
Islam
- Wallerstein, Immanuel
Yale University
Liberalism

- Ward, Kerry
Rice University
Trading Patterns, Indian Ocean
- Warrington, Bruce
National Measurement Laboratory
Time, Conceptions of
- Watt, John
Independent Scholar
Asia
Zhu Yuanzhang
- Webb, Adam K.
Princeton University
Ecumenicism
Political Thought
- Webb, Jr., James L. A.
Colby College
Caravan
Cinchona
Gum Arabic
Malaria
Quinine
- Weeks, Theodore R.
Southern Illinois University
Ethnicity
- Weiner, Douglas R.
University of Arizona
Stalin, Joseph
- Wells, Scott C.
California State University, Los Angeles
Roman Empire
Thomas Aquinas, St.
- Wendelken, Rebecca
Methodist University
Dress
- Wesseling, H. L.
Leiden University
Berlin Conference
French Empire
- Wessinger, Catherine
Loyola University
Millennialism
- Westwood, David
Independent Scholar
Military Engineering
Military Training and Discipline
- Wheatcroft, Stephen
University of Melbourne
Famine
- Whigham, Phillip
Georgia Military College
Buddhism
- Wiesner-Hanks, Merry
University of Wisconsin, Milwaukee
Sex and Sexuality
- Williams, Michael
Oriel College
Deforestation
- Witzling, Mara R.
University of New Hampshire
Art—Europe
- Wong, R. Bin
University of California, Los Angeles
China
Comparative History
State, The
- Wood, Alan T.
University of Washington, Bothell
Freedom
- Yoffee, Norman
University of Michigan
State Societies, Emergence of
- Young, Kanalu G. T.
University of Hawaii, Manoa
Kamehameha I
- Zachman, Randall C.
University of Notre Dame
Luther, Martin
- Zukas, Alexander M.
National University
Green Revolution
Marx, Karl
Music and Political Protest
- Zukas, Lorna
San Diego, California
Senghor, Léopold
Shaka Zulu
- Zyla, Benjamin
Independent Scholar
European Union



Preface

World history is both very new and very old: new because it entered high school and college classrooms only in the last fifty years, and old because it dates back to the first historians' attempts to answer an age-old question, "How did the world get to be the way it is?" in a different, more adequate way. The most obvious answer was a creation story, and creation stories were probably universal among our remotest ancestors since they sufficed to explain everything—as long as people believed that the world continued as it began, with only seasonal and other cyclical repetitions, such as birth and death.

But in the second half of the first millennium BCE, in three different parts of the world, social and political changes became so swift and unmistakable that a few individuals in Israel, Greece, and China pioneered what we call historical writing. The historical books of the Jewish scriptures, as edited after the return from exile in Babylonia (subsequent to 539 BCE) recorded God's universal jurisdiction over history in some detail from the time of Abraham—and more generally from the moment of creation in the Garden of Eden. Soon afterward, the Greek historian Herodotus (484–425 BCE) set out to award "a due meed of glory" to the deeds of Greeks and barbarians within a wide circle extending from Egypt in the south to Scythia (modern Ukraine) in the north, touching on India to the east, and extending throughout the Mediterranean coastlands to the west. About three centuries later, the Chinese historian Sima Qian (c. 145–85 BCE) brought Chinese historical records, already voluminous, into comprehensible order by writing a comparably far-ranging account of China's ruling

dynasties from their beginnings, including their relations with a wide circle of adjacent barbarians. Faint traces of contact between the Chinese and Mediterranean worlds have been detected in Herodotus's remarks about mythical peoples living somewhere beyond Scythia, but for all practical purposes the historiographical traditions of China, Greece, and the Biblical scriptures remained independent of one another for many centuries.

By the fifth century CE St. Augustine (354–430) and others gave the Christian version of world history an enduring form, building on Jewish precedent, modified by faith in human redemption through Jesus Christ's sacrifice and anticipating a Day of Judgment when God would bring the world to an end. This remained standard among Christians through succeeding centuries and soon was matched by a Muslim version of the same story, starting with creation and ending in the Day of Judgment as freshly set forth in Muhammad's revelations.

In China the structuring of world history around the rise and fall of imperial dynasties, pioneered by Sima Qian, remained unchallenged among Confucian scholars until the twentieth century. But in the Western world religious narratives, Jewish, Christian, and Muslim, began to compete with revived interest in ancient and pagan Persian, Greek, and Roman historians as early as the fourteenth century. Accelerating social change that did not fit easily with religious expectations also disturbed older ideas. This provoked a handful of thinkers to propose new views of world history. Among Muslims, Ibn Khaldūn (1332–1406) stands preeminent; he developed a thoroughly secular, cyclical, and strikingly



original theory of social change. Among Christians, Giambattista Vico (1668–1744) was perhaps the most provocative thinker. Vico set out to fuse the Christian and pagan traditions of historiography into what he called a “new science” of social change that also featured cyclic repetition. But such radical new ideas remained exceptional. Nearly everybody remained content with at least lip service to familiar religious accounts of God’s plan from Creation to the Day of Judgment, even when Muslim poets revived the Persian language as a vehicle for celebrating ancient pagan chivalry, and among Christians the study of Greek and Roman classical authors, including historians, began to infiltrate schools and universities.

In the early nineteenth century, however, when medieval and modern history first entered the curriculum of leading German universities, liberal and nationalist ideas dominated the minds of those who set out to discover “what really happened” by investigating state archives and medieval chronicles. They hoped to discard superstitions and other errors by careful source criticism, and, intent on detail, assumed that all the true and tested facts of history would speak for themselves. And so they did, shaped, as they were, by questions asked about the national past by eager researchers who wanted to understand why German states had come to lag so far behind the French in modern times.

Simultaneously, source criticism began to challenge the Christian version of history as never before by treating biblical texts as human handiwork, liable to error just like other ancient, often-copied manuscripts. This style of historical research soon spread from Germany to the English-speaking world, even infiltrating France after 1870. Detail and more detail often became an end in itself, and the enormity of available source materials grew steadily as new subthemes for investigation proliferated. Nonetheless, by the close of the nineteenth century, Lord Acton (1834–1902) and others, drawing largely on classical precedents, created an overarching liberal interpretation of history that flattered French, British, and U.S. national sensibilities so well that it soon dominated schooling in those countries.

At risk of caricature, this liberal-nationalist version of world history can be summarized as follows: What mattered in the past was the history of liberty, since free men, acting voluntarily, were more efficient both in war and in peace and thus acquired collective power and wealth, as well as all the satisfactions of personal freedom. So Europe, and more specifically western Europe, was where history—significant history, that is—happened. Elsewhere endless repetition of insignificant routines prevailed, so that Leopold von Ranke (1795–1886), the most revered German historian of his time, could say in his nine-volume *World History* (1882–1888) that history ended for Muslims in 1258 with the Mongol sack of Baghdad, since by then they had fulfilled their world historical role of transmitting important Greek texts to medieval Europeans!

Those texts were important because they helped to show how ancient Greeks and republican Romans pioneered the history of liberty. But ancient liberty did not last and had to be refreshed in western Europe by barbarian invasions in the early Middle Ages, followed by slow and precarious constitutional and legal innovation, punctuated by sporadic revolutionary upheavals, all aimed at restraining tyrannical government and dogmatic religion. By the end of the nineteenth century, the principles of liberty embodied in representative government and religious freedom had become clear, and their fruits were apparent in the superior power and wealth that Great Britain, France and, *in potentia*, the United States enjoyed. But Germany and Russia were also eager aspirants to greatness, and clashing national ambitions in due course provoked World War I.

This was the view of history to which I was apprenticed in the 1920s and 1930s, even though my teachers had half forgotten the reason for the distribution of attention that prevailed in their classrooms. Yet World War I had already profoundly challenged the theme of progress toward constitutional perfection upon which this naive and ethnocentric version of human history rested. Freedom to suffer and die in the trenches was a questionable climax to liberal progress; and the prolonged depression that set in after 1929, followed by

World War II, cast still further doubt on the idea that the recent emergence of constitutional government as exercised in a few nation-states in a small part of the world was what gave meaning to the whole human past.

As usual, a few restless thinkers responded. The most notable were Oswald Spengler (1880–1936) in Germany and Arnold J. Toynbee (1889–1975) in Great Britain, both of whom elaborated on classical notions of cyclical rise and fall by treating western Europe as one of several parallel civilizations that followed similar, perhaps even identical, patterns of growth and decay. Spengler and Toynbee both attracted many readers by offering a new explanation for the shifting currents of world affairs, but academic historians paid scant attention, busy as they were pursuing ever more numerous hotly debated questions about specific times and places in the past.

Their investigations expanded literally around the globe after World War II, when Asia, Africa, and every other part of the world started to attract the efforts of professional historians. Simultaneously, archaeologists and anthropologists were exploring the deeper, unrecorded past as well. The resulting very rapid advance in general information about diverse local pasts soon allowed a few ambitious world historians to develop more inclusive, more nearly adequate versions of the whole human career. In the United States serious efforts to teach world history also began to invade high school classrooms after World War II, as U.S. entanglements abroad became more and more obvious. Colleges and universities lagged behind, but of late many have also begun to teach the subject.

What to emphasize and what to exclude remained a critical question, for, like other scales of history, an intelligible world history requires selective attention to the confusion of knowable facts. Some world historians chose to organize their books around the rise and fall of civilizations, as Spengler and Toynbee had done; others took a continent-by-continent approach. A school of

Marxists emphasized a world system in which better-organized core states exploited peripheral peoples for their own enrichment. But whether such world systems were very ancient or dated only from the rise of modern capitalism divided this school into clashing factions. Others argued that cooperation was more significant than exploitation and that communication, allowing the spread of new techniques and ideas within geographical and ecological limits, was the governing pattern of world history.

No single recipe for writing and studying world history has yet emerged and none ever may, since different peoples, with different heritages and different local conditions, are sure to remain at odds with one another, even if globalization persists and intensifies in times to come. But it seems sure that as long as entanglements with the rest of the world remain as inescapable as they are today, national and local history will not suffice to explain how things got to be the way they are. In that case, that age-old question will surely continue to require teachers and scholars to provide some sort of world history for an answer.

This pioneering *Berkshire Encyclopedia of World History* is designed to help both beginners and experts to sample the best contemporary efforts to make sense of the human past by connecting particular and local histories with larger patterns of world history. Contributors have no single viewpoint, but the editorial process, in choosing what articles to commission and how to distribute attention, aimed at inclusiveness and aspired to insight. How well we succeeded is for users to discover. The only thing uniting those who cooperated to produce this volume is the belief that human history as a whole is important to study and think about, since genuinely inclusive world history is such a helpful, even necessary, guide for survival in the crowded world in which we live.

William H. McNeill

A Long March: Creating the *Berkshire Encyclopedia of World History*

To study world history once meant to study civilizations, regional histories, chronology, and “great men,” but that has changed in recent years. Now we recognize the importance of interactions and of the connections and exchanges of people, other organisms, ideas, and material goods over time and place. Today, world history draws on fields of inquiry such as archaeology, anthropology, and geography to map out the broad patterns of the human experience, and calls on environmental history, the biological and physical sciences, and economics to enrich our understanding of that experience. The new world history is also explicitly comparative: It seeks to compare what happened at different places at the same time and to help us understand why life has not always been the same in all places at all times.

Writing the new world history are scholars of women’s history, the history of indigenous people, Big History (which takes history back as far as the Big Bang), the history of science, and environmental history. They have taken many different paths to world history. In a recent interview, William (Bill) McNeill noted that he was first drawn to world history in the 1930s by the work of the anthropologist Clark Wissler, whose studies of social change among Plains Indians provided an intriguing model of culture change. Another of our editors, David Christian, was drawn to world history from Russian history because he felt unable to answer his students’ very basic and sensible question, “When did history begin?” His search for an answer took him into archaeology, paleoanthropology, astronomy, and biol-

ogy, and resulted in a synthesis of these seemingly unrelated disciplines with history.

Berkshire Encyclopedia of World History

The *Berkshire Encyclopedia of World History* is the first truly encyclopedic resource for world history. Developed by an editorial team of more than thirty leading scholars and educators, led by William H. McNeill, Jerry H. Bentley, David Christian, David Levinson, John (J. R.) McNeill, Heidi Roupp, and Judith Zinsser, the encyclopedia’s 538 articles were written by a team of 330 historians, archaeologists, anthropologists, sociologists, geographers, and other experts from around the world. The encyclopedia takes a dynamic world history perspective, showing connections and interactions through trade, warfare, migration, religion, and diplomacy over time and place. It begins with a 56-page book-within-a-book by David Christian, titled *This Fleeting World: An Overview of Human History*. This overview explains the three eras in human history—the Foraging Era, the Agrarian Era, and the Modern Era—and serves as a reader’s guide to the entire encyclopedia. Major articles by leading scholars, including Martin Marty and Immanuel Wallerstein, examine essential themes and patterns such as Art, Disease, Government, Religion, Science, and War and Peace. Branching out from these overviews are hundreds of articles on processes, movements, places, events, and people. Students and teachers at the high school and college levels as well as scholars and professionals will

turn to this definitive work for a connected, holistic, view of world history—the story of humans and their place on earth.

Contemplating the Task

Berkshire Publishing's journey to the creation of the *Berkshire Encyclopedia of World History* (BEWH) has also been a long and interesting one. Our aspirations are big: Despite our small staff and our location in a tiny town in western Massachusetts, we have tackled such ambitious projects as the six-volume *Encyclopedia of Modern Asia* (Scribners 2002) and the three-volume *Encyclopedia of World Environmental History* (Routledge 2004), both of which have garnered industry awards for excellence. But we have always dreamed of taking on the ultimate topic—world history.

ASSEMBLING THE EDITORS

While the *Encyclopedia of World Environmental History* was still in the making Karen Christensen mentioned this ambition to John McNeill, the lead editor for that project. His advice was simple: "Talk to Jerry Bentley." He made an introduction by email, and Jerry, editor of the *Journal of World History*, began to help us plan the encyclopedia.

We have been blessed to have the advice of Bill McNeill from even earlier. In 1995, before Berkshire Publishing had even been christened, Karen Christensen was asked to do a small project on world history. Robert Ferrell, a distinguished U.S. presidential historian, suggested she contact William McNeill for help, mentioning that he had retired to a family house not far from Great Barrington. With some trepidation she wrote to Bill and received a response within just a few days. "Frankly I don't think you should claim that you can squeeze the known history of the world into existing national boundaries," he wrote, "Too many things run across those boundaries, including what I would count the most important matters—diffusion of skills and ideas in particular . . . Still I will be glad to discuss these issues with you and find out how you intend to proceed."

Bill was generous with advice—and with lunch, often including something from his garden. Correspondence

continued to be by U.S. mail, made easier by the fact that in this rural corner of New England letters between Great Barrington, Massachusetts, and Colebrook, Connecticut, invariably arrive the next day, a minor felicity of time and place that has helped throughout the project. Over the years, Bill followed our progress with other publications, prepared for other publishers. Perhaps it was our successful creation of the *Encyclopedia of Modern Asia* that made him believe that we could really produce the goods when we announced that we wanted to launch our independent publishing imprint with an encyclopedia of world history.

Bill understands the web of communication and connection that enables human creativity and invention, and he made all the initial connections that in turn made this remarkable project possible. Among the people he put us in touch with were Heidi Roupp, founder of the e-journal *World History Connected*, and David Christian, author of the 2004 *Maps of Time*. A meeting in August 2002 with David Christian and Bill and John McNeill—in addition to several members of the McNeill clan and our own children too—on the porch of Bill and his wife Elizabeth's family home in Colebrook, Connecticut, might be considered the official starting point for the BEWH.

THE FRAMING CONFERENCE

The World History Association has been helpful in many ways, and gave us the timely chance to meet many world historians at its conference in Seoul in August 2002. The project's original staff editor, Junhee (June) Kim, a native of Korea and veteran project editor of our *Encyclopedia of Modern Asia*, arranged a traditional dinner. We became acquainted with Ralph Crozier, the WHA's president elect, and also met Larry Beaber and Despina Danos of the Educational Testing Service, who were in the process of launching the AP world history program.

We held a small conference for our editors in October 2002, an ideal time of year to bring people to the Berkshires. The participants met for two days to frame the encyclopedia, develop a mission statement, and work



through several significant areas of debate. Our core group was here, with the exception of Jerry Bentley. We were also joined by Judith Zinsser, whose expertise in women's world history made her a valuable member of our editorial group, by Ralph Crozier (the president of the World History Association), and by historian Al Andrea from the University of Vermont.

We had a detailed agenda and were agreeably surprised by how hard everyone worked, and delighted that they seemed to enjoy the chance to discuss world history in big terms as much as we did. The personal interactions, and the connections we developed as we talked, argued, and ate and drank together, was vital to the development of the project.

Addressing the Issues

There were several things we had to hammer out before we began. How would we organize the encyclopedia? How many volumes would it be? How would we tackle the many potential topics?

ORGANIZATION

The question of how to organize the encyclopedia was among the more difficult to answer. We felt a strong need to be faithful to the core beliefs of world history, but we also wanted the content to be easily accessible to readers. We discussed this problem at our first planning session, where David Christian worried that it would be difficult to organize in book format a body of knowledge that at its core is about movement, interaction, and change.

Of the possible organizational schemes, we rejected the traditional chronological approach that delineates several eras in world history and then organizes articles in that time sequence. We felt it was unsuitable because there is no general agreement among world historians about how to divide up the history of the world into eras; eras simply do not begin or end at one point in time, and their start and end dates vary widely across regions. Furthermore, a straight chronological approach would have been at odds with our definition of world history, which stresses movements and connections and transformations across eras.

We also rejected the “peoples and cultures” scheme of organizing the content by region (Africa, Europe, etc.), as we felt that approach was neither faithful to world history nor helpful to users, as many of our planned entries (such as, for example, “Trade Patterns—Indian Ocean” or “British Empire”) cross not only regions but also eras and topics.

We finally decided on a combination of the alphabetical approach—the usual and best scheme for an encyclopedia—and a topical approach. By arranging the content alphabetically, we make it very easy to find entries, and there are ample cross references and blind entries to help create the sense of movement and connection that David Christian had identified as vital to our project. We also created thirty-four categories (such as Arts and Literature, Health and Disease, and Technology and Science), and allowed each article to be assigned to as many of those categories as was appropriate. This way we were able to highlight and reinforce the interconnected nature of world history concepts.

SIZE

The size of the encyclopedia was also an issue. It started at only four volumes and became five when the cuts were just too painful. Even so, we asked ourselves whether we could cover the history of humankind in only five volumes, especially since we had taken six volumes for the *Encyclopedia of Modern Asia*.

But we were conscious that there was great demand for world history at the high school level, and it was important to us to make this vital information available at a price high schools could afford. We also knew that this was only the beginning of our work in world history, and that we would expand the core set with volumes on specific topics. So we compromised with an initial five-volume, 2,500-page work that provides the foundation of what will become the Berkshire World History Library. We plan to publish a series of related, smaller titles starting early in 2006 and the works together—fully integrated and enhanced with large archives of additional content—will become an online Berkshire Knowledge Center.

APPROACH

The major challenge for our authors was to write on their subjects from what we call “a world history perspective.” It wasn’t always clear to them—or to us—exactly what that would look like. An ideal article, we believed, would show how its subject changed over time; the subject’s connections with other concepts, times, and places; and the subject’s significance for and influence on the present. But it took concrete examples, not abstract discussion, to make clear what was truly successful. Consider the story of our article “Glass.”

The article that was submitted said a great deal about the influence of glass on history—on the scientific revolution, on household hygiene—but relatively little about the history of glass itself. As such, it fit within our world history approach. But there were questions raised by our experienced staff editors, who were expecting a very detailed article on the history of glass itself—how it is made, technical improvements in its manufacture. It took considerable discussion to clarify that what we wanted was basically what we had received: a world history of glass. Nevertheless, the article still required a little additional coverage of the basic history, and “Glass” became our touchstone when it came to deciding if an article was right for us or not, and helped us see the difference between the kind of coverage offered in this encyclopedia and the coverage readers might find elsewhere. (It’s sheer serendipity that this clarity came through “Glass.”)

Fruition

All publishers have tales of heroic efforts made to meet deadlines, and Berkshire’s story of bringing the BEWH to print is a classic case. The BEWH had a firm end date, because the American Library Association had years before scheduled January 2005 as its first-ever conference in Massachusetts, Berkshire Publishing’s home state. Launching the encyclopedia in Boston, itself a historic city, was clearly perfect.

This meant that Berkshire had to finalize the encyclopedia during the summer of 2004, a time when it seemed half our contributors were away, some in Russia, some in China, some in Latin America, and others at the Olympic

Games in Athens. We tracked down the author of our “Assyrian Empire” article on a dig in Turkey, and most appropriately received his article from there. Bill McNeill stepped in to write a number of articles, including “Dance and Drill” and “Ancient Greece,” a particularly beautiful article. Bill said that writing on Greece was a chance to revisit his past, since he’d spent a good deal of time there early in his career, and the perspective he provides on what the idea, and ideals, of ancient Greece have meant in world history are a fine demonstration of what we have attempted in the entire encyclopedia.

How to Use the Encyclopedia

With our emphasis on connections and movements over and across time and place, the encyclopedia must also allow users to see connections across articles and move around the encyclopedia easily. We have provided users with six tools to facilitate such movement.

1. Three general era overviews, gathered together in *This Fleeting World: An Overview of Human History*, a book-within-a-book that appears in Volume 1 and Volume 5, divide human history into three overarching eras—foraging, agrarian, and modern.
2. Eleven content overviews provide a general topical context for many of the shorter, more focused articles.
3. The Reader’s Guide at the beginning of each volume classifies all articles into thirty-four topical categories, with articles placed in as many categories as appropriate.
4. Several dozen blind entries throughout the volume direct readers who search for articles under one name to their correct location under a different name.
5. Extensive cross-references at the end of articles point readers to other related articles. Each article is also followed by a rich listing (“Further Reading”) of world-class sources that students can consult.
6. The index indicates volume as well as page numbers. The encyclopedia contains 538 articles ranging in length from about 500 words to over 4,000 words. Our thirty-four topical categories are listed below; the

articles assigned to each category are listed in the Reader's Guide at the front of each volume.

THE TOPICAL CATEGORIES

Africa
 Americas
 Arts and Literature
 Asia
 Biography
 Commerce—Organizations and Institutions
 Commerce—Systems and Patterns
 Commerce—Trade Goods and Products
 Communication
 Conflict and Peace Making—Diplomacy and Peace Making
 Conflict and Peace Making—War and Conflict
 Cultural Contact and Relations
 Daily Life
 Disciplines and Fields of Study
 Environment and Ecology
 Eras, Empires, States, and Societies
 Europe
 Evolution
 Government, Politics, and Law
 Health and Disease
 International and Regional Organizations
 Migration
 Periodization
 Philosophy, Thought, and Ideas
 Population
 Religion and Belief Systems
 Research Methods
 Social and Political Movements
 Technology and Science
 Themes—Models and Processes
 Themes—Places
 Transportation
 Ways of Living
 Women and Gender



are extracts from primary source material designed to give readers a first-hand sense of what life was like for people in different places at different times. For example, a sidebar in the “Time, Conceptions of” article contrasts Muslim and Christian conceptions of time while a sidebar in the “Trading Patterns, Indian Ocean” article provides a description of Goa by an early English settler.

Additionally, there are over 600 maps, illustrations, and photos. The maps include sixty maps drawn for the encyclopedia and thirty old maps. The old maps are significant not just because they show something about history but because they are part of history itself. They tell us much about how the mapmakers and the government officials and explorers for whom they made the maps saw the world and their place in it. For example, the series of maps in the “Africa” article show how European perceptions of Africa changed over the years as Europeans came into more frequent and extensive contact with Africa. Many of the photos and illustrations come from older (eighteenth- and nineteenth-century) sources and, like the old maps, are themselves also part of history. As we note in captions to several illustrations, some present highly stylized and romanticized images of other peoples and other places and provide readers with insight into how Westerners, for example, perceived the peoples they encountered in the Americas.

Acknowledgements

We want to mention and acknowledge our deep appreciation for the major role played by the editorial boards in this work. Bill McNeill was ever-vigilant in reviewing the evolving articles list to keep us focused on world history, pointing out gaps and redundancies as well as suggesting authors and taking on ten writing assignments himself. The editors worked very hard to define world history, to keep our focus on the needs of students, teachers, and historians and to produce an article list that covered each field. They also recommended numerous authors, reviewed articles quickly and thoroughly and kept us moving in the right direction. The board of associate editors also helped shape the headword list. Several (Philip,

OTHER CONTENT

The encyclopedia also contains more than 500 sidebars and more than 300 quotes. Many of the sidebars

Vries, Langer) also reviewed articles and suggested authors. Editors also shared their wisdom about maps and illustrations.

In John McNeill's conclusion to *The Human Web*, he mentions the forces of disorder and randomness, or entropy, evident in a home (especially one with many small children) as well as in the universe. There are forces of entropy at work in publishing offices, too. In creating the BEWH in less than two years, we naturally had to strive for other qualities evident in human history, a movement toward "order, structure, and complexity." This effort required the shared determination of an extended network of individuals.

We want to acknowledge the special contribution of every member of our staff to this project. None of them will forget the summer weeks when all other work took a back burner to our effort to complete the BEWH on time. It meant long hours and immense coordination as people took on new tasks in order to make sure everything that had to be done by 13 August 2004 was indeed finished. In fact, the content wrap-up was done on 12 August, celebrated with a bottle of champagne. We acknowledge the spirit, determination, and willingness of the Berkshire staff that made completion of this project possible: Karen Advokaat, Rachel Christensen, Tom Christensen, Sarah Conrick, Debbie Dillon, Jess LaPointe, Courtney Linehan, Marcy Ross, Gabby Templet, Peggy Thieriot, and Trevor Young. Their dedication and teamwork was inspiring in every sense.

Our final effort was coordinated by Ben Kerschberg, our new vice president and general manager, who joined us only days before we began the final push on the BEWH, having made the brave decision to make a career change from law to publishing. Ben calmly and steadily moved the manuscript and the staff through the final stages and coordinated work with our composers, proofreaders, and indexers. His end-of-the-day updates showing our steady progress added to our drama and helped keep everyone on target. It was difficult to remember that he was in fact learning the whole process himself as we went along.

We had many outside contributors who made this project possible, people whose work is too often unacknowledged. Our freelance production team—copyeditors, composers, and proofreaders—exerted themselves in a manner that was nothing short of magnificent. The original page design was prepared by Jeff Potter, and composer Brad Walrod took the lead in making sure that all aspects of the design were fully utilized. The amazing composition work and extra efforts of both Linda Weidemann and Steve Tiano also deserve special attention. It is impossible to count how many times Linda and Brad came through in the clutch. The same holds true of our copyeditors—Francesca Forrest, Adam Groff, Mike Nichols, Carol Parikh, Mark Siemens, Daniel Spinella, and Rosalie Wieder. Finally, but by no means least, our proofreaders—Mary Bagg, Sue Boshers, Robin Gold, Libby Larson, Amina Sharma, and Barbara Spector—worked countless hours to bring the BEHW into its final shape. The work of all the above-mentioned individuals was invaluable.

Early on, David Christian offered to "sketch out" the great eras in human history in three major overview articles. This is the kind of grand task at which David excels, and although he may have regretted the offer, he never complained, and produced drafts at a speed that was really super-human. The result, a set of three connected essays on the Foraging Era, Agrarian Era, and Modern Era, have been combined under the title *This Fleeting World: An Overview of Human History*, that appears in Volume 1 and Volume 5 of the encyclopedia.

Finally, we want to salute Bill McNeill and his wife Elizabeth. Bill celebrates his eighty-seventh birthday as this work is published, and we are counting on seeing his set marked up with corrections for the next edition, like his personal copy of *The Rise of the West*, the endpapers of which are dense with notes. This work by no means says it all about the history of the world, but we hope Bill will agree that it provides a new vantage point for the work ahead.

*David Levinson & Karen Christensen
Berkshire Publishing Group
Great Barrington, Massachusetts
www.berkshireworldhistory.com*

Editorial Board

Senior Editor

William H. McNeill, University of Chicago,
Emeritus

Editorial Board

Jerry H. Bentley, University of Hawaii, Manoa
David Christian, San Diego State University
David Levinson, Berkshire Publishing Group
J. R. McNeill, Georgetown University
Heidi Roupp, World History Center
Judith P. Zinsser, Miami University (Ohio)

Associate Editorial Board

Ross Dunn, San Diego State University
Ryba Epstein, Rich East High School
Brian Fagan, University of California, Santa Barbara
Daniel Headrick, Roosevelt University
Kailai Huang, Massachusetts College of Liberal Arts
Marnie Hughes-Warrington, Macquarie University
Tom Laichas, Crossroads School
Erick Langer, Georgetown University
Craig Lockard, University of Wisconsin, Green Bay
Pamela McVay, Ursuline College
Carl Nightingale, University of Massachusetts,
Amherst
Patrick O'Brien, London School of Economics
Hugh Page, Jr., University of Notre Dame
Paul Philip, Lancaster Independent School District
Mrinalini Sinha, Pennsylvania State University
Peer Vries, Leiden University

About William H. McNeill, Senior Editor

William H. McNeill is the Robert A. Millikan Distinguished Service Professor Emeritus of History at the University of Chicago. He received his Ph.D. from Cornell University in 1947 (and 20 honorary degrees since) and is a renowned world historian and amateur gardener. In 1996 McNeill was awarded the prestigious Erasmus Prize for his contributions to European culture.

McNeill's many books include: *Rise of the West: A History of the Human Community* (9th edition, 1991), which received the National Book Award & Gordon J. Laing prize; *Plagues and Peoples* (revised edition, 1998); *Pursuit of Power* (1982); *Keeping Together in Time: Dance & Drill in Human History* (1995); and, with J. R. McNeill, *The Human Web: A Birdseye View of Human History* (2003).

He has been a member of the editorial board for the *Encyclopedia Britannica* (1981–1998); the vice chairman of the Christopher Columbus Quincentenary Jubilee Commission (1985–1993); co-chair of the curriculum task force for the National Commission on Social Studies (1987–1989); vice chairman for the National Coun-

cil for History Standards (1992–1994); and president of the American History Association (1985).

McNeill married Elizabeth Darbishire in 1946 and they have four children and eleven grandchildren. Each summer and at Christmas they come together for a clan gathering at the family home in Connecticut.



William H. McNeill



About the Editors

JERRY H. BENTLEY is Professor of History at the University of Hawaii and editor of the award-winning *Journal of World History* published by the World History Association. His early publications focused on European cultural history, particularly on the religious, moral, and political thought of Renaissance humanists. More recently his research has concentrated on the history of cross-cultural interactions. His recent publications include *Old World Encounters: Cross-Cultural Contacts and Exchanges in Pre-Modern Times*, *Shapes of World History in Twentieth-Century Scholarship*, and (with Herbert F. Ziegler) *Traditions and Encounters: A Global Perspective on the Past*. When he is not attempting to peer into the global past, he can usually be found either on the tennis courts or in the swimming pool.

DAVID CHRISTIAN was born in New York and raised in Nigeria and England. Fascinated with the Soviet Union, the “dark side” for so many living in the “West,” he learned Russian and spent ten months doing graduate research in Leningrad (St. Petersburg). He met his wife, Chardi, in London, Ontario, where they both acted in a summer-stock repertory company. In spite of ambitions to become an actor, he gained a doctorate from Oxford University, and landed a job at Macquarie University in Sydney. He naturally gravitated toward world history, and in the late 1980s, started teaching a course that began with the origins of the universe. In 2001 he took a position at San Diego State University, where he teaches world history, environmental history, and Russian history to classes ranging in size from 10 to 500 students. He has a son (Joshua) living in England and a

daughter (Emily) living in Australia. He enjoys hiking, traveling, playing chess and singing (friends travel long distances to avoid his rendition of *Stenka Razin*). He is the author of *Maps of Time: An Introduction to Big History*; *A History of Russia, Central Asia and Mongolia: Volume 1: Inner Eurasia from Prehistory to the Mongol Empire*; *Imperial and Soviet Russia: Power, Privilege and the Challenge of Modernity*; and *Living Water: Vodka and Russian Society on the Eve of Emancipation*.

DAVID LEVINSON is a cultural anthropologist specializing in the comparative study of human culture. Having grown up in Newark, New Jersey, he has also had a strong interest in social issues and ethnic relations. After three years as a medic in the U.S. army (1966–1969) he returned to school and earned a Ph.D. in cultural anthropology at SUNY/Buffalo. His early research was on social issues including homelessness and the treatment of substance abuse. In the early 1980s he gained some notoriety when he suggested that Alcoholics Anonymous was no more effective than several other approaches to alcoholism treatment. From 1975 to 1997 he was with the Human Relations Area Files at Yale University, latterly as vice-president, and left only to found the Berkshire Publishing Group with Karen Christensen in an interesting match of marriage and business. He has edited several multi-volume encyclopedias and is author of *Ethnic Groups Worldwide*, *Toward Explaining Human Culture*, and *Tribal Living Book*, which helps children to better understand other cultures by making blowguns and bear traps. He is currently, in addition to publishing duties, writing a history

of the AME Zion Church in Great Barrington and battling to save the town's architectural treasures as a member of the Historic District Commission (locally known as the "Hysterical Commission").

J. R. McNEILL is Professor of History in the School of Foreign Service at Georgetown University and holder of the Cinco Hermanos Chair in Environmental and International Affairs. He is the author of *Something New Under the Sun: An Environmental History of the Twentieth-Century World*, which won a few modest prizes. Eric Hobsbawm judged it "the most original history book" he had read in 2000, while others noted its failure to provide "market-based solutions" to the world's problems or to acknowledge that ecological apocalypse is upon us. He is co-author with William McNeill of *The Human Web: A Bird's-Eye View of World History*. He was born in Chicago in 1954, educated at Swarthmore College and Duke University, and lives agreeably if frenetically with his triathlete wife and four powerful forces of entropy—a daughter and three sons. His eccentricities include a taste for blues from the 1950s, Greek food, and an unfathomable attachment to the hapless Chicago White Sox.

HEIDI ROUPP is the director of world history programs to establish the field of world history and support the work of school and university educators. These National Endowment for the Humanities programs include twenty-seven summer institutes, three university program models for pre-service teachers at California State University, Queens College, and the University of Illinois at Chicago, and the World History Network, a website for teachers. She is the founder and Executive Director of *World History Connected: The E Journal for Learning and Teaching* [www.worldhistoryconnected.org]. Heidi was president of

the World History Association (1998–2000) and the first recipient of the American Historical Association's Beveridge Family Teaching Prize. Heidi lives and teaches in Aspen, Colorado. Some of her former world history students now climb Everest, speak Chinese, and travel the world as writers, actors, computer programmers, teachers, doctors, and engineers. Others are still in Aspen, where they ski, raise families, and energetically continue to make Aspen a special place to live.

JUDITH P. ZINSSER is Professor of History and affiliate in Women's Studies at Miami University (Ohio), a displaced New Yorker living in southwestern Ohio. She is a former president of the World History Association, having become a world historian when she was developing curriculum for the United Nations School and for the International Baccalaureate. She has written on women and gender in a world history context for *Women's International Forum*, the *World History Journal*, and the *Journal of Women's History*. Among her books are *A History of Their Own: Women in Europe from Prehistory to the Present*, coauthored with Bonnie S. Anderson (2nd ed., 2000) and *A New Partnership: Indigenous Peoples and the United Nations System* (1994), commissioned by UNESCO. *A History of Their Own* remains the only narrative history of European women and has been translated into German, Italian, and Spanish; the *New Partnership* is one of the few studies of indigenous issues in a worldwide context. Her current project is a biography of the Marquise Du Châtelet (1706–1749), and she is the French translator of Newton's *Principia*, for Viking Penguin. Zinsser was surprised to discover that the challenges of writing about just one woman are as daunting as any she had to face, as a world historian, trying to write and teach about all women and all men.

Photo & Quotation Credits

Photo Contributors

The many line drawings and etchings included in the encyclopedia come from Berkshire's archive of historical images, drawn from a variety of eighteenth-, nineteenth-, and twentieth-century books and other publications.

Photographs also come from Berkshire archives and from the following contributors, whose guidance and assistance we acknowledge here with much gratitude.

David Breiner	Karim Khan
Michael Broadway	Kathleen Kimball
Elisa Carrillo	Klaus Klostermaier
Garry Chick	David Levinson
Karen Christensen	Elias Levinson
Thomas H. Christensen	James Lide
David Courtwright	Peter Laird
Simon Coleman	James Lide
Klaus Dierks	David Markham
Hannes Galter	Mark McNally
Christian Gelzer	Melvin E. Page
Donna Halper	Kenneth Sheedy
Chris Howell	Jirí Svoboda
Justin M. Jennings	

Quotations Credits

The following individuals graciously contributed quotations from their personal collections in order to enrich this work with wonderful quotes that illuminate myriad perspectives on world history. Special praise is due David Christian, who supplied a wealth of his favorite quotes related to world history. We are indebted to each of the following for her or his assistance.

Brian J. Boeck	Leo Lefebre
Erve Chambers	J. David Markham
David Christian	Martin Marty
Luke Clossey	David McComb
Mark Cohen	J. R. McNeill
Paul Doerr	Peter Morris
Lori A. Feldstein	Adam Mossoff
Donna Gabaccia	Hugh Page, Jr.
Thomas V. Gilson	Melvin E. Page
Andre Gunder Frank	Andrew Sherratt
Terry Jones	Peter G. Stillman
Ben Kerschberg	Chandar Sundaram
K. Kimball	

Berkshire World History Library

Forthcoming titles

Berkshire Encyclopedia of China
Berkshire Encyclopedia of Cities in World History:
Urban Legends
Berkshire Encyclopedia of Ethnic Groups Worldwide
Berkshire's Global Village Companion
Berkshire Encyclopedia of Migration in World History:
A World in Motion
Berkshire Encyclopedia of World Sport
Berkshire Encyclopedia of Terrorism

Related resources published under other imprints

Encyclopedia of Modern Asia (with Scribners)
Encyclopedia of World Environmental History
(with Routledge)
Encyclopedia of Community (with Sage)
Encyclopedia of Leadership (with Sage)
Religion & Society series (with Routledge)





World History— About the Design

Page Design

Designing a cover for an encyclopedia of human history is a daunting task. It was essential that we convey the breadth of the human experience over time, not simply use a patchwork of images from particular times and places. It was Bill McNeill, the senior editor, who suggested cave paintings as a possible inspiration. Standing on his porch one day, as we said good-bye after a meeting and the lunch he invariably prepares, he said, “Maybe cave art would do it.” He wondered if we could, somehow, use cave art to show the main eras in human history. A tall order indeed, but it inspired us to come up with the basic concept you see here.

It was serendipitous that cover artist Lisa Clark, formerly with Harvard University Press, turned up that week at Berkshire Publishing. Lisa truly understood what we were trying to accomplish in illustrating *World History* and took our rough ideas to create a vivid cover that takes us from the foraging era, through agrarian-

ism, into the modern age. In addition, because we had also talked about “big history” during our first conversation (“big history” is history since the Big Bang, and its main exponent is David Christian, one of our editors and author of *This Fleeting World*, the book-within-a-book in Vols. 1 and 5), she created a background for the cave art stone that shows the whole cosmos, the setting for human history.

The display font chosen for the design of this book is *Journal*, which has a rough-hewn quality that makes it compatible with the stone texture motif taken from the cover. It also has a contemporary and accessible feel.

The font selected for the actual text of this book is *Wilke*, which has a rich, worldly feel, yet remains highly legible. It also has a contemporary feel but with sufficient classical resonance to suit a work of world history.

Interior pages were designed by Jeff Potter of Shelburne Falls, Massachusetts.

How to Spell It and How to Say It: 100 Important People, Places, and Terms in World History

Ralph Waldo Emerson once said, “A foolish consistency is the hobgoblin of little minds.” Each time Berkshire Publishing Group sets to work on creating an encyclopedia, we review our guidelines on how we will present the names and terms that have changed in the course of history or through language alterations. We strive for consistency, though not the foolish kind against which Emerson warned.

Languages and geographic terms evolve regularly, and sometimes staying current means that we can’t be completely consistent. Adding to the challenge is the fact that words in languages not based on the Latin alphabet (e.g., Chinese, Japanese, Arabic, Hebrew) must be transliterated—spelled in the language of another alphabet or “romanized” into English. And even within a language, transliteration systems change. Many people who grew up knowing the Wade-Giles system of Chinese romanization (with such spellings as Peking and Mao Tse-tung) had to become accustomed to seeing words using the pinyin romanization system introduced in the 1950s (with new spellings such as Beijing and Mao Zedong).

By and large, we look to *Merriam-Webster’s Collegiate Dictionary*, 11th Edition (known as M-W 11), as our spelling authority, with *Merriam-Webster’s Biographical Dictionary* and M-W’s *Geographic Dictionary* for terms not in M-W 11. However, sometimes we overrule Merriam-Webster for a compelling reason. For example, historian Ross Dunn—who wrote the *Berkshire Ency-*

lopedia of World History’s article on Ibn Battuta (and who is a leading expert on Battuta)—spells the name without the final “h,” while M-W spells it “Battutah.” In another case, the West African town of Timbuktu is so well known by that spelling that we opted for it in preference to M-W’s preferred “Tomboctou.”

Finally, there is the matter of using diacritical marks—accent marks, ayns (‘) and hamzas (’), and other markings—that provide phonetic distinctions to words from other languages. The use of diacritics is always a big question for a publisher on international topics. We—and the scholars we work with—tend to prefer to use various marks, from European-language accent graves to Japanese macrons and Arabic ums and ahs. But we have found that they can distract, and even intimidate, the general reader, so our policy has generally been to minimize their use. In time, as U.S. students become more comfortable with non-English forms and as we publish for global audiences, we will be able to make greater use of these marks, which are designed to be helpful to the reader.

That said, we thought it would be useful (and fun) to provide a listing of the “Top 100” terms—suggested by our editors—that have alternate spellings and names. We’ve also listed pronunciations for non-English names and terms. (The syllable in capital letters is the accented one; note, however, that Chinese and other languages do not necessarily stress syllables as is done in English.)

People

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
ALEXANDER THE GREAT		Alexander, Alexander of Macedon
ASOKA	a-SHO-ka	Ashoka
AUGUSTINE, ST.		Augustine of Hippo
AURANGZEB	or-ang-ZEB	'Alamgir
CAESAR, AUGUSTUS		Augustus Caesar, Caesar Augustus
CHIANG KAI-SHEK	chang kye-shek	Jiang Jieshi
CONFUCIUS	con-FYU-shus	Kong Fuzi, K'ung Fu-tzu
GANDHI, MOHANDAS	GHAN-dee, mo-HAN-des	Mahatma Gandhi
GALILEO GALILEI	ga-li-LAY-o ga-li-LAY	not Galilei, Galileo
GENGHIS KHAN	JEN-gis kon	Chinghis, Chinghiz, Chingiz
HAN WUDI	hon woot-see	Han Wu-ti
IBN BATTUTA	ib-un ba-TOO-ta	Ibn Battutah
IBN SINA	ib-un see-na	Avicenna
JESUS		Jesus Christ, Jesus of Nazareth
KANGXI EMPEROR	kong-hsee	K'ang-hsi
KHUBILAI KHAN	KOO-blah kon	Kublai, Qubilai
LAOZI	laud-zuh	Lao-tzu, Lao Tzu
LEONARDO DA VINCI	le-o-NAR-do da VIN-chee	da Vinci, Leonardo
MAO ZEDONG	mao zeh-DON	Mao Tse-tung
MENCIUS	MEN-chee-us	Mengzi, Meng-tzu, Meng Tzu
MOSES		Moshe
MOTECUHZOMA II	mo-tek-w-ZO-ma	Montezuma II; Moctezuma
MUHAMMAD	mo-HA-med	Mohammad, the Prophet Muhammed, Mehemet
NAPOLEON	na-POLE-eon	Napoleon Bonaparte
QIN SHI HUANGDI	chin sher hwang-dee	Ch'in Shih Huang-ti
SALADIN	SAL-a-den	Salah al-Din, Selahedin
SIDDHARTHA GAUTAMA	si-DAR-ta GAU-ta-ma	Buddha, The
SIMA QIAN	suma chee-en	Ssu-ma Ch'ien
SUI WENDI	sway wen-dee	Sui Wen-ti
SUI YANGDI	sway yahng-dee	Sui Yang-ti
SÜLEYMAN	soo-lay-MON	Süleyman the Magnificent, Süleyman I, Suleiman the Lawgiver
SUN YAT-SEN	soon yat-sen	Sun Yixian
TANG TAIZONG	tahng taizong	T'ang T'ai-tsung

People (continued)

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
THOMAS AQUINAS, ST.	a-KWY-nas	not Aquinas, Thomas
TIMUR	TEE-more	Timur Lenk, Tamerlane, Tamburlaine
URBAN II	Otho	also Otto, Odo, Eudes—of Lagery
ZHENG HE	jeng huh	Cheng Ho
ZHU YUANZHANG	joo you-ahn-jahng	Chu Yüan-chang

Places

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
AFRO-EURASIA		Afroeurasia; Africa, Europe, and Asia
AKSUM		Axum
BEIJING	bay-jin	Peking
BUKHARA	boo-KAR-a	Bokhara, Boukhara
CAMBODIA		Khmer Republic, Kampuchea
CHANG RIVER	chan	Yangzi, Yangtze
CZECH REPUBLIC AND SLOVAKIA	chek, slow-VA-kee-a	Czechoslovakia
EAST INDIES		Insular Southeast Asia
EGYPT		United Arab Republic
GUANGZHOU	gwang-joe	Canton
HABSBURG		Hapsburg
HUANGE RIVER	hwang	Huanghe, Yellow River
INNER ASIA		Central Asia
IRAN		Persia
IRAQ		Mesopotamia
ISTANBUL	iss-tan-BULL	Constantinople, Byzantium
KANDAHAR	KON-da-har	Qandahar
KARA-KUM	ka-ra-KOOM	Karakum
KAZAKHS	kah-zaks	Khazaks
KHWARIZM	KWA-ra-zem	Kwarezm, Khwarazm, Khuwarizm
KONGO		Congo
KUSHAN EMPIRE	koosh-an	Kushana, Kusana
MESOAMERICA		Middle America, Central America
MUGHUL		Moghol, Mogol
MUMBAI	MUM-bye	Bombay
MYANMAR	MY-AN-mar	Burma
SAMARQAND	SA-mar-kand	Samarkand

(Continues on next page)

Places (continued)

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
SHILLA KINGDOM	shil-la	Silla kingdom
SONGHAI		Songhay
SRI LANKA	shree LAN-ka	Ceylon
THAILAND	TIE-land	Siam
TIMBUKTU	tim-BUCK-too	Timbukto, Tombouctou
USSR		Soviet Union, Soviet Empire, Russia
VIETNAM, LAOS, CAMBODIA		known collectively as Indochina
WEST INDIES		Caribbean

Religious , Political, and Cultural Terms

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
AL-JAZEERA	as-jah-ZEER-a	Al Jazeera, Al-Jazeera
AL-QAEDA	al-KAY-da	Al Qaeda, al-queda
AL-RAZI	al-rah-zee	ar-Razi
ANALECTS OF CONFUCIUS		Sayings of Confucius
BHAGAVAD GITA	ba-ga-vad GEE-ta	<i>Bhagavadgita</i>
BIBLE, THE		Old and New Testaments
BRAHMA		Brahman, Brahmin
CZAR		tsar
DAOISM		Taoism
INDIGENOUS PEOPLES		primitive, native, nonindustrial
LATTER-DAY SAINTS		Mormons
MUSLIM		Moslem
NATIVE AMERICANS		Indians, American Indians
PERSIAN		Achaemenian, Achaemenid empire
QING DYNASTY	ching	Ch'ing dynasty
QURAN		Qur'an, Koran
SASANIAN		Sassanian, Sasanid, Sassanid empire
SHIA	SHEE-a	Shi'a
SHARIA	sha-REE-a	Shari'a, Islamic law
SIVA	SHEE-va	Shiva
SONG DYNASTY		Sung dynasty
TANG DYNASTY		T'ang dynasty

Religious , Political, and Cultural Terms (continued)

<i>Preferred form</i>	<i>Pronunciation</i>	<i>Alternates</i>
TORAH		Five Books of Moses
VODUN	voo-DOO	Voodoo, Vodou
WORLD WAR I		First World War, The Great War
WORLD WAR II		Second World War
YIJING		<i>I-ching, Yi-jing</i>

© Berkshire Publishing Group 2005
All Rights Reserved

September 2004. Version 1.

The five-page *How To Spell It and How To Say It* may be copied and distributed free of charge in its entirety for noncommercial educational use only. No more than thirty copies can be distributed at a time without written permission. It may not be

reproduced, quoted, or published in any form or media for any other purpose without written permission from the copyright holder. This guide is also available online in PDF format. It will be updated regularly, and readers are encouraged to download the current version and to send us suggestions for additions, corrections, and other alternate usages. Berkshire welcomes questions, too, from teachers and students.

www.berkshirepublishing.com



This Fleeting World

An Overview of Human History

David Christian

Professor of History

San Diego State University

2004

Thus shall ye think of all this fleeting world:

A star at dawn, a bubble in a stream,

A flash of lightning in a summer cloud,

A flickering lamp, a phantom, and a dream.

• THE DIAMOND SUTRA

Contents

Introduction *iv*

Beginnings: The Era of Foragers 1

- Studying the Era of Foragers 1
 - Beginnings of Human History 4
 - Out of Africa, into Controversy 4
 - What Makes Us Different? 5
 - Foraging Lifeways 6
 - Kith and Kin 7
 - Living Standards 8
 - Leisurely but Brief 9
 - Major Changes during the Era of Foragers 9
 - Technological Change 10
 - Migrations from Africa 11
 - Human Impacts on the Environment 11
 - Picking up the Pace 12
 - Affluent Foragers 12
 - The Era of Foragers in World History 14
-

Acceleration: The Agrarian Era 15

- Origins of Agriculture 15
 - Earliest Evidence of Agriculture 16
 - Affluent Foragers 18
 - Full-Blown Agriculture 19
 - Seeds of Change 19
- General Characteristics and Long Trends 20
 - Village-Based Societies 20
 - Demographic Dynamism 20
 - Accelerated Technological Innovation 21
 - Epidemic Diseases 22
 - Hierarchies of Power 23
 - Relations with Nonagrarian Communities 23
- Agrarian Communities before Cities:
 - 8000–3000 BCE 24
 - A World of Villages 24
 - Emergence of Hierarchy 24
 - Early Glass Ceiling 25
 - Leaders and Leadership 25
- The Earliest Cities and States: 3000 BCE–500 BCE 26
 - Afro-Eurasia and the Americas 26
 - Agrarian Civilizations 27
 - Imperial States 28

- Agriculture, Cities, and Empires: 500 BCE–1000 CE 29
 - Afro-Eurasia 29
 - The Americas 30
 - Expansion in Other Areas 31
 - Agricultural Societies on the Eve of the Modern Revolution: 1000–1750 31
 - Creation of Global Networks 32
 - Impact of Global Networks 34
 - Agrarian Era in World History 35
-

Our World: The Modern Era 36

- Major Features and Trends of the Modern Era 37
 - Increases in Population and Productivity 37
 - City Sprawl 38
 - Increasingly Complex and Powerful Governments 38
 - Growing Gap between Rich and Poor 39
 - Improved Opportunities for Women 40
 - Destruction of Premodern Lifeways 40
- Explaining the Modern Revolution 41
 - Accumulated Changes of the Agrarian Era 42
 - Rise of Commercial Societies 42
 - Development of a Single Global Network 42
 - Western Europe's Emergence as a Global Hub 43
 - Other Factors 43
- Industrial Revolution: 1750–1914 43
 - Three Waves of the Industrial Revolution 44
 - Economic Developments 45
 - Democratic Revolution 45
 - Cultural Changes 46
- Twentieth-Century Crisis: 1914–1945 47
 - Global Upheaval 48
 - Rearmament 49
 - Buying into Consumerism 49
 - Crisis and Innovation 50
- Contemporary Period: 1945–Present 51
 - Rockets and Rubles 52
 - China Adapts 52
 - Coca-Cola Culture and the Backlash 54
 - Burning the Candle 55
- Modern Era in World History 55

Introduction

World history focuses on the interconnections between people and communities in all eras of human history. Instead of telling the history of this nation or that community, it explores the histories of women and men across the entire world, the stories that all humans share just because they are human. Creating the history of humanity is one of the larger and more important goals of world history. Encyclopedias, however, encourage more sharply focused enquiries into the past. By convention, they divide their subject matter into manageable chunks, and then rearrange those chunks in alphabetical order, which is wonderful if you are researching particular topics, or just grazing. But such an organization can also obscure the larger picture. The overview of human history that follows in this section is designed to help readers keep sight of the unity of human history even as they enjoy the rich diversity of details, questions and approaches in the body of the encyclopedia.

Of course, no survey this brief can do more than sketch some of the main lines of development of our remarkable species, and it is probable that different histo-

rians would have drawn the lines in different ways. Nevertheless, as world history has evolved during the last fifty years or so, some consensus has emerged on the crucial turning points in human history. The three essays that follow are intended to distil something of that consensus, leaving more detailed treatments to the articles in the body of the encyclopedia. Besides, brevity has its advantages. Above all, it should be possible to read this survey in one or two sittings, a short enough period to remember the beginning of the story as you reach the end. Cross-references and bibliographical references will lead you quickly to other essays if you want to find out more about any particular subject.

My fellow editors (William McNeill, Jerry Bentley, Karen Christensen, David Levinson, John McNeill, Heidi Roupp, and Judith Zinsser) have been extremely generous in commenting on earlier drafts of these essays, and I want to thank them formally for their suggestions. However, I was stubborn enough not to accept all of their advice, so I alone must accept responsibility for remaining errors of fact, emphasis and balance.

David Christian

Comparing the Three Eras of Human History

<i>Era 1:</i> <i>FORAGING</i>	250,000–8000 BCE	Most of human history; small communities; global migrations; megafaunal extinctions; slow population growth
<i>Era 2:</i> <i>AGRARIAN</i>	8000 BCE–1750 CE	Intensification; rapid population growth; cities, states, empires; writing; different histories in different world zones
<i>Era 3:</i> <i>MODERN</i>	1750–Present	Single, global system; rapid growth in energy use; increasing rate of extinctions; increased life expectancies

Beginnings: The Era of Foragers



The era of foragers was the time in human history when all human communities lived by searching out or hunting food and other things they needed, rather than by growing or manufacturing them. Such people are also called “hunter-gatherers.” The era of foragers is also known as the “Paleolithic era” (*Paleolithic* means “old Stone Age”). The era of foragers was the first and by far the longest era of human history. It was the time when the foundations of human history were laid down.

Foragers gather the resources they need for food, for shelter and clothing, and for ritual activities and other purposes. For the most part they do so without trying to transform their environment. The exceptional cultural and technological creativity of human foragers distinguishes their lifeways (the many different ways in which people relate to their environments and to each other) from the superficially similar lifeways of nonhuman species, such as the great apes. Only humans can communicate using symbolic language. Language allows men and women to share and accumulate knowledge in detail and with great precision. As a result of this constant sharing of knowledge, the skills and lifeways of ancient foragers gradually adapted to a huge variety of environments, creating a cultural and technological variety that has no parallel among any other large species. The extraordinary facility with which human communities adapted to new circumstances and environments is the key to human history.

As far as we know, the earliest human beings were foragers; thus, the era of foragers began about 250,000 years ago, when modern humans—members of our own species, *Homo sapiens*—first appeared on Earth. Although some foraging communities exist even today, the era of

foragers ended about ten thousand years ago with the appearance of the first agricultural communities because after that time foraging ceased to be the only lifeway practiced by human societies.

Studying the Era of Foragers

Historians have had a difficult time integrating the era of foragers into their accounts of the past because most historians lack the research skills needed to study an era that generated no written evidence. Traditionally the era of foragers has been studied not by historians, but rather by archaeologists, anthropologists, and *prehistorians*.

In the absence of written evidence scholars use three other fundamentally different types of evidence to understand the history of this era. The first type consists of physical remains from past societies. Archaeologists study the skeletal remains of humans and their prey species, left-over objects such as stone tools and other manufactured objects or the remains of meals, as well as evidence from the natural environment that may help them understand climatic and environmental changes. We have few skeletal remains for the earliest phases of human history; the earliest known skeletal remains that are definitely of modern humans date from around 160,000 years ago.

For more on these topics, please see the following articles:

Archaeology p. 107 (v1)

Art, Paleolithic p. 180 (v1)

Dating Methods p. 487 (v2)

Human Evolution—Overview p. 930 (v3)

Paleoanthropology p. 1412 (v4)

Key Events in the Foraging Era

300,000– 200,000 BCE	Modern human beings appear in Africa.
250,000 BCE	Stone tool technology becomes more sophisticated.
200,000 BCE	Humans have spread across Africa.
100,000 BCE	Humans begin migrating out of Africa to Eurasia.
50,000 BCE	Development of more sophisticated technologies begins to accelerate. Large-scale extinction of many large land animals begins.
50,000– 40,000 BCE	Australia is settled.
30,000 BCE	Siberia is settled.
30,000– 20,000 BCE	More sophisticated tools such as the bow and arrow are invented.
13,000 BCE	North America is settled.
12,000 BCE	South America is settled.
10,000 BCE	The foraging era ends with the development of agriculture.

However, archaeologists can extract a surprising amount of information from fragmentary skeletal remains. A close study of teeth, for example, can tell us much about diets, and diets can tell us much about the lifeways of early humans. Similarly, differences in size between the skeletons of males and females can tell us something about gender relations. By studying fossilized pollens and core samples taken from sea beds and ice sheets that have built up during thousands of years, archaeologists have managed to reconstruct climatic and environmental

changes with increasing precision. In addition, the dating techniques developed during the last fifty years have given us increasingly precise dates, which allow us to construct absolute chronologies of events during the entire span of human history.

Although archaeological evidence tells us mostly about

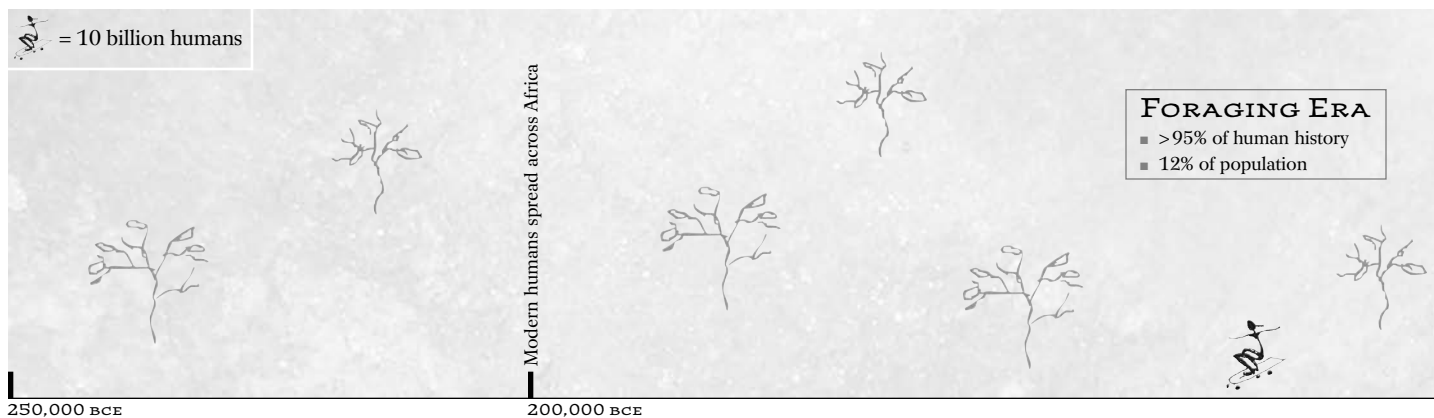
For more on these topics, please see the following articles:

Foraging Societies, Contemporary p. 764 (v2)

Genetics p. 809 (v2)

250,000 Years of Human History

(NOT DRAWN TO SCALE)



the material life of our ancestors, it can occasionally give us tantalizing glimpses into their cultural and even spiritual lives. Particularly revealing are the astonishing artistic creations of early human communities, although precise interpretations of artifacts such as the great cave paintings of southern France and northern Spain remain beyond our grasp.

The second major type of evidence used to study early human history comes from studies of modern foraging communities. Such studies must be used with caution because modern foragers are modern; their lifeways are all influenced in varying degrees by the modern world. Nevertheless, by studying modern foraging lifeways, we can learn much about basic patterns of life in small foraging communities; thus, such studies have helped prehistorians interpret the meager material evidence available.

Recently a third type of evidence, based on comparative studies of modern genetic differences, has provided new ways of studying early human history. Genetic studies can determine degrees of genetic separation between modern populations and can help us estimate both the age of our species and the dates at which different populations were separated by ancient migrations.

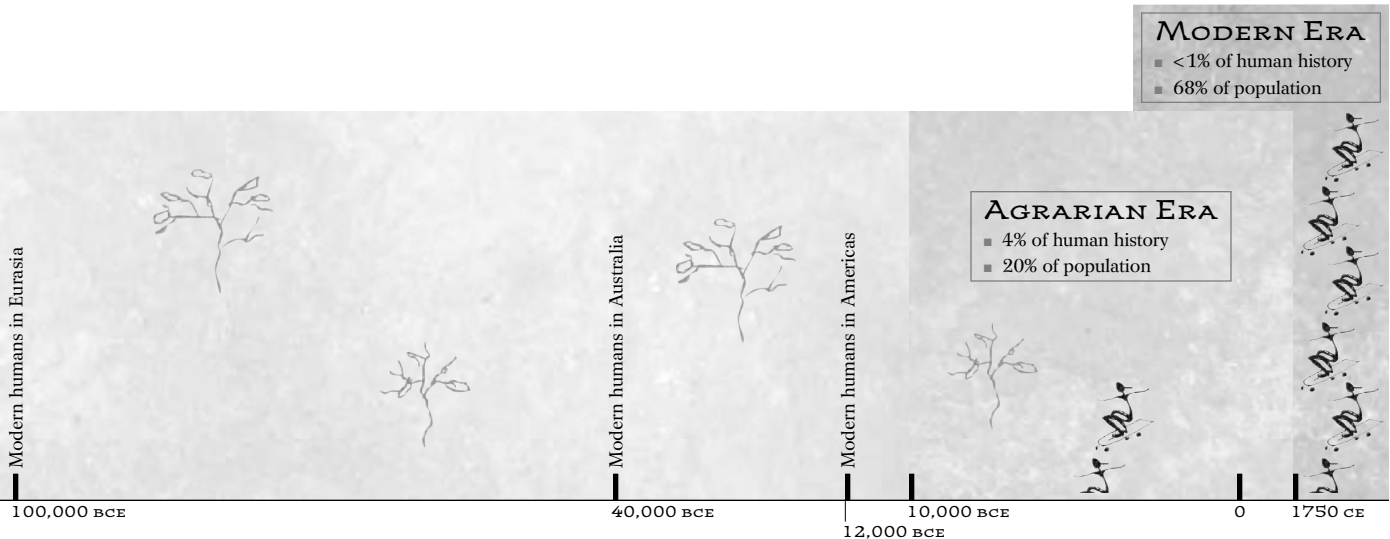
Integrating these different types of evidence into a coherent account of world history is difficult not only because most historians lack the necessary expertise and training, but also because archaeological, anthropologi-

Carbon Dating

Carbon 14 (hereafter C 14) was developed by the American chemist Willard F. Libby at the University of Chicago in the '50s, for which he received the Nobel Prize in Chemistry in 1960. C 14 dating provided an accurate means of dating a wide variety of organic material in most archaeological sites, and indeed in most environments throughout the world. The method revolutionized scientists' ability to date the past. It freed archaeologists from trying to use artifacts as their only means of determining chronologies, and it allowed them for the first time to apply the same absolute time scale uniformly from region to region and continent to continent. Many older archaeological schemes were overturned with the advent of C 14 dating. Today it is possible to date sites . . . well back into the late Pleistocene [Era] with reliable and accurate chronologies.

Source: Hudson, M. (n.d.). *Understanding Carbon 14 dating*. Retrieved September 8, 2004, from http://www.flmnh.ufl.edu/natsci/vertpaleo/aucilla10_1/Carbon.htm

cal, and genetic evidence yields types of information that differ from the written sources that are the primary research base for most professional historians. Archaeological evidence from the era of foragers can never give us the intimate personal details that can be found in written sources, but it can tell us much about how people lived. Integrating the insights of these different disciplines is one



Who Does What in the Study of Human History

Archaeologists excavate, preserve, study, and classify artifacts of the near and distant past in order to develop a picture of how people lived in earlier cultures and societies. The profession combines a broad understanding of history with sophisticated digging procedures and plain old hard work, making it one of the most demanding and competitive branches of the social sciences.

Source: Princeton Review. (2004). Retrieved September 8, 2004, from <http://www.princetonreview.com/cte/profiles/dayInLife.asp?careerID=10>

Prehistorian: An archaeologist who specializes in prehistory—the study of prehistoric humankind.

Source: Merriam-Webster Online. (2004). Retrieved September 8, 2004, from <http://www.m-w.com>

The word *anthropology* itself tells the basic story—from the Greek *anthropos* (“human”) and *logia* (“study”)—it is the study of humankind from its beginnings millions of years ago to the present day. . . . Though easy to define, anthropology is difficult to describe. Its subject matter is both exotic (e.g., star lore of the Australian aborigines) and commonplace (anatomy of the foot). And its focus is both sweeping (the evolution of language) and microscopic (the use-wear of obsidian tools). Anthropologists may study ancient Mayan hieroglyphics, the music of African Pygmies, and the corporate culture of a U.S. car manufacturer.

Source: American Anthropological Association. (2004). Retrieved September 8, 2004, from <http://www.aaanet.org/anthbroc.htm>

of the main challenges of world history, and it is faced most directly in studying the era of foragers.

Beginnings of Human History

Scholars still debate when our species first appeared. One hypothesis—the multiregional model, defended today by a minority of physical anthropologists, including Milford Wolpoff and Alan Thorne—states that modern humans evolved gradually, during the last million years, in many

regions of the Afro-Eurasian landmass. Through time, protohumans (early human ancestors) in different regions diverged enough to create the genetic foundations for modern regional variants (races) while maintaining sufficient genetic contact to remain a single species. The multiregional model implies that human history began, quite gradually, sometime during the last million years. The evidence for this model comes mainly from the comparative study of skeletal remains.

OUT OF AFRICA, INTO CONTROVERSY

A second hypothesis, sometimes known as the “Out-of-Africa hypothesis,” relies mainly on genetic comparisons of modern humans, although it also claims to be consistent with surviving skeletal evidence. It starts from the observation that modern humans are genetically very similar to each other, so similar in fact that they cannot have been evolving for more than about 250,000 years. This hypothesis suggests that all modern humans are descended from just a few ancestors who lived about 250,000 years ago. Today the greatest genetic variety among humans can be found in Africa, which suggests that Africa is where humans evolved and where they lived for the longest time before some began to migrate around the world. If the Out-of-Africa hypothesis is correct, modern humans evolved in Africa from later forms of *Homo ergaster*. The new species probably emerged quite rapidly in a remote, isolated group.

The Out-of-Africa hypothesis itself comes in two main variants. The first variant, which has long been defended by the archaeologist Richard Klein and others, suggests that even if modern humans evolved in Africa perhaps 250,000 years ago, the earliest evidence of distinctively human behaviors, including improved hunting skills and artistic activities of various kinds, dates from no earlier than about fifty thousand to sixty thousand years ago. In this variant humans were not fully human, and human

For more on these topics, please see the following articles:

Afro-Eurasia p. 44 (v1)

Human Evolution—Overview p. 930 (v3)

Periodization—Overview p. 1453 (v4)

The further you get away from any period, the better you can write about it. You aren't subject to interruptions by people that were there. • FINLEY PETER DUNNE (1867–1936)

history did not really begin until some minor genetic changes made available the full range of modern symbolic languages. This variant of the Out-of-Africa hypothesis depends on the proliferation of new types of tools and artifacts that is evident in the archaeology of Eurasia from about fifty thousand years ago.

More recently, however, some supporters of the Out-of-Africa hypothesis have argued that the significance of these changes may have been exaggerated by virtue of the fact that scholars have conducted so much more archaeological research in Eurasia than in Africa, the presumed homeland of modern humans. In a careful analysis of the available archaeological evidence from Africa, the anthropologists Sally McBrearty and Alison Brooks have argued that evidence of distinctively human activities appears in Africa as early as 200,000 to 300,000 years ago and coincides with the appearance of skeletal remains that may be those of the earliest modern men and women. If McBrearty and Brooks are right, our species appeared in Africa between 200,000 and 300,000 years ago, and these dates mark the real beginnings of human history. The periodization adopted in this essay is based on these findings. It adopts the compromise date of 250,000 years ago for the appearance of the first humans and for the beginnings of human history. However, we should remember that this date remains subject to revision.

WHAT MAKES US DIFFERENT?

What distinguishes us so markedly from other species? What distinguishes human history from the histories of all other animals? Many answers have been given to these fundamental questions. Modern answers include the ability to walk on two legs (bipedalism), the use of tools, the ability to hunt systematically, and the development of exceptionally large brains. Unfortunately, as studies of closely related species have become more sophisticated,

For more on these topics, please see the following articles:

Creation Myths p. 449 (v2)

Engines of History p. 654 (v2)

Language, Classification of p. 1106 (v3)

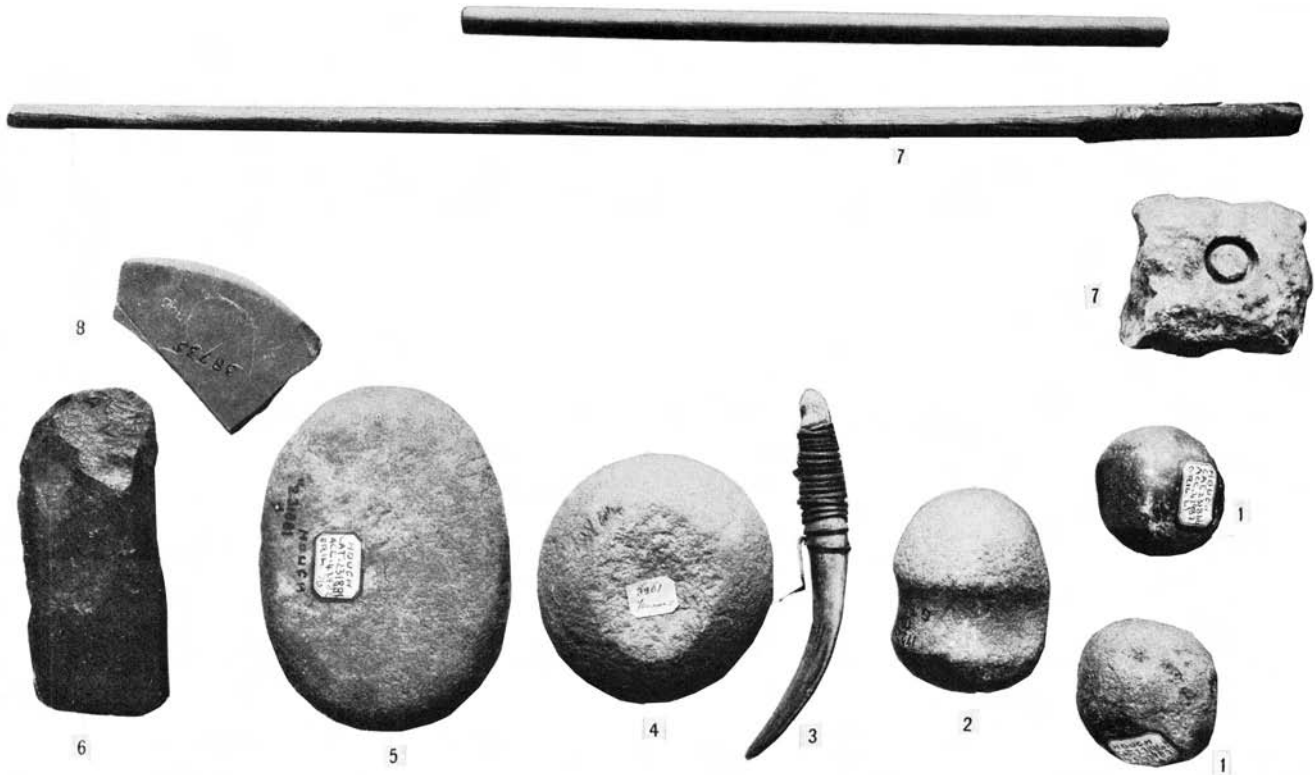
Language, Standardization of p. 1111 (v3)

we have learned that many of these qualities can be found to some degree in closely related species such as chimpanzees. For example, we now know that chimpanzees can make and use tools and can also hunt.

At the moment the most powerful marker, the feature that distinguishes our species most decisively from closely related species, appears to be symbolic language. Many animals can communicate with each other and share information in rudimentary ways. However, humans are the only creatures who can communicate using symbolic language: a system of arbitrary symbols that can be linked by formal grammars to create a nearly limitless variety of precise utterances. Symbolic language greatly enhanced the precision of human communication and the range of ideas that humans can exchange. Symbolic language allowed people for the first time to talk about entities that were not immediately present (including experiences and events in the past and future) as well as entities whose existence was not certain (such as souls, demons, and dreams).

The result of this sudden increase in the precision, efficiency, and range of human communication systems was that people could share what they learned with others; thus, knowledge began to accumulate more rapidly than it was lost: Instead of dying with each person or generation, the insights of individuals could be preserved for future generations. As a result, each generation inherited the accumulated knowledge of previous generations, and, as this store of knowledge grew, later generations could use it to adapt to their environment in new ways. Unlike all other living species on Earth, whose behaviors change in significant ways only when the genetic makeup of the entire species changes, humans can change their behaviors significantly without waiting for their genes to change. This cumulative process of collective learning explains the exceptional ability of humans to adapt to changing environments and changing circumstances and the unique dynamism of human history. In human history culture has outstripped natural selection as the primary motor of change.

These conclusions suggest that we should seek the beginnings of human history not only in the anatomical



This plate shows a variety of tools of increasing technological complexity used by humans at different times and places to shape stone. Tools 1–5 are used to flake or abrade stone. Tools 6 and 7 (long horizontal instruments and accompanying square to the right) are different parts of drills used with sand and tool 8 is a slate saw.

details of early human remains, but also in any evidence that hints at the presence of symbolic language and the accumulation of technical skills. The findings of McBrearty and Brooks link the earliest evidence of symbolic activity (including hints of the grinding of pigments for use in body painting) and of significant changes in stone tool technologies (including the disappearance of the stone technologies associated with most forms of *Homo ergaster*) with the appearance of a new species known as "*Homo helmei*." The remains of this species are so close to those of modern women and men that we may eventually have to classify them with our own species, *Homo sapiens*. The earliest anatomical, technological, and cultural evidence for these changes appears in Africa between 200,000 and 300,000 years ago.

Foraging Lifeways

Archaeological evidence is so scarce for the era of foragers that our understanding of early human lifeways has been shaped largely by conclusions based on the study of

modern foraging communities. Indeed, the notion of a foraging mode of production was first proposed by the anthropologist Richard Lee during the late 1970s on the basis of his studies of foraging communities in southern Africa. However, the scanty archaeological evidence can be used to discipline the generalizations suggested by modern anthropological research.

The scarcity of remains from this era, combined with what we know of the ecology of modern foragers, makes us certain that levels of productivity were extraordinarily low by modern standards. Humans probably did not extract from their environment much more than the 3,000 kilocalories per day that adult members of our species need to maintain a basic, healthy existence. Low

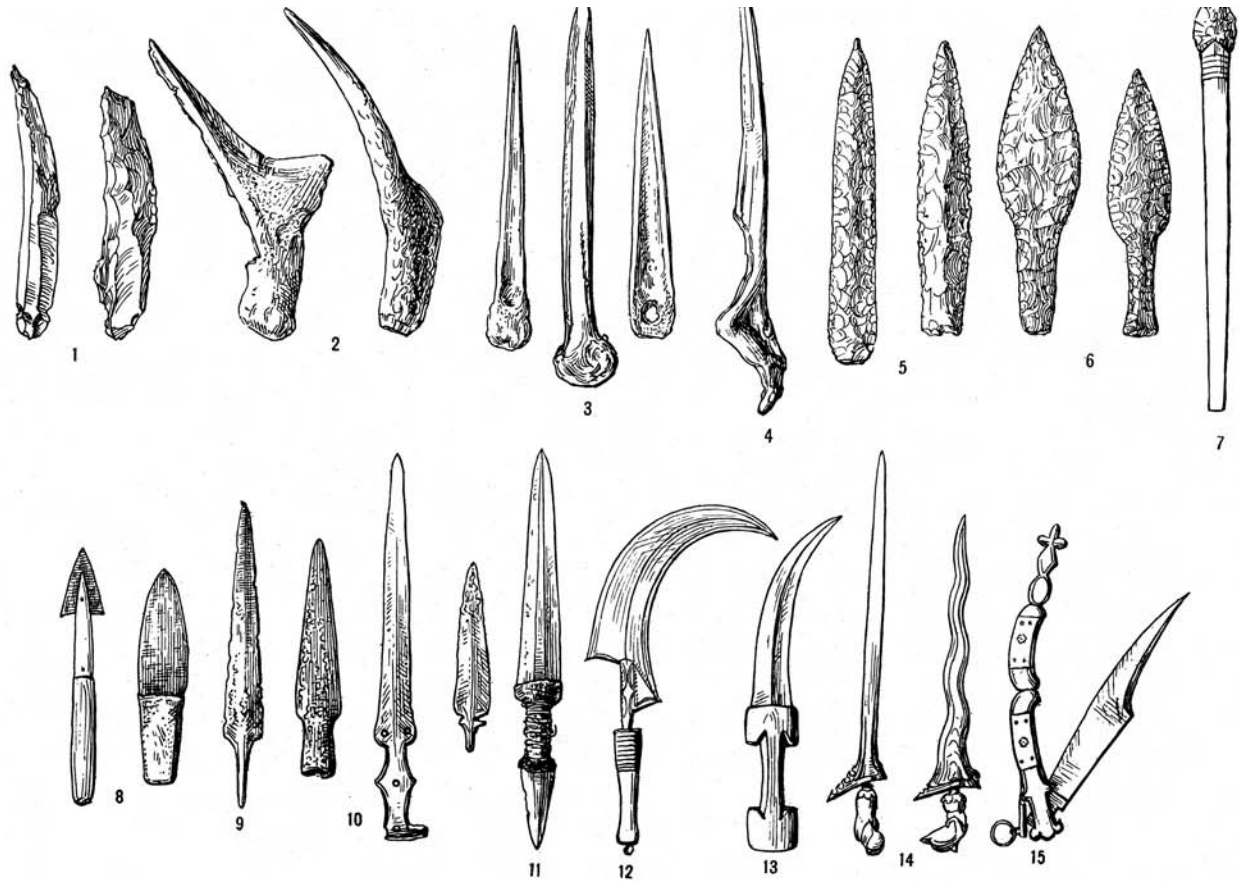
For more on these topics, please see the following articles:

Foraging Societies, Contemporary p. 764 (v2)

Indigenous Peoples p. 963 (v3)

Kinship p. 1083 (v3)

Marriage and Family p. 1195 (v3)



This plate shows the variety of stabbing tools used over the course of human history and the different sizes, shapes, and materials used to make the weapons. Tools 1-2 are made from flaked stone, 2 from antler, 3 from animal bone, 4 from antler, 5 through 8 from chipped stone, and 9 through 15 from copper, bronze, and iron.

productivity ensured that population densities were low by the standards of later eras, averaging perhaps as little as one person per square kilometer. This fact meant that small numbers of humans were scattered over large ranges. Modern studies suggest that foragers may have deliberately limited population growth to avoid over-exploitation of the land; modern foragers can limit population growth by inhibiting conception through prolonged breast feeding, by using various techniques of abortion, and sometimes by killing excess children or allowing the sick and unhealthy to die.

Because each group needed a large area to support itself, ancient foragers, like modern foragers, probably lived most of the time in small groups consisting of no more than a few closely related people. Most of these groups must have been nomadic in order to exploit their large home territories. However, we can also be sure that

many links existed between neighboring groups. Almost all human communities encourage marriage away from one's immediate family. Thus, foraging communities likely met periodically with their neighbors to swap gifts, stories, and rituals, to dance together, and to resolve disputes. At such meetings—similar, perhaps, to the corroborees of aboriginal Australians—females and males may have moved from group to group either spontaneously or through more formal arrangements of marriage or adoption.

KITH AND KIN

Exchanges of people meant that each group normally had family members in neighboring groups, creating ties that ensured that people usually had some sense of solidarity between neighboring groups as well as some linguistic overlapping. Ties of kinship created local networks

What we know of the past is mostly not worth knowing. What is worth knowing is mostly uncertain. Events in the past may roughly be divided into those which probably never happened and those which do not matter. • WILLIAM RALPH INGE (1860–1954)

that smoothed the exchange of goods, people, and ideas between neighboring groups.

Studies of modern foraging societies suggest that notions of family and kinship provided the primary way of thinking about and organizing social relations. Indeed, in *Europe and the People without History* (1982), the anthropologist Eric Wolf proposed describing all small-scale societies as “kin-ordered.” Family *was* society in a way that is difficult for the inhabitants of modern societies to appreciate. Notions of kinship provided all the rules of behavior and etiquette that were needed to live in a world in which most communities included just a few persons and in which few people met more than a few hundred other people in their lifetime.

The idea of society as family also suggests much about the economics of foraging societies. Relations of exchange were probably analogous to those in modern families. Exchanges were conceived of as gifts. This fact meant that the act of exchanging was usually more important than the qualities of the goods exchanged; exchanging was a way of cementing existing relationships. Anthropologists say that such relationships are based on “reciprocity.” Power relations, too, were the power relations of families or extended families; justice and discipline—even violent retribution for antisocial behavior—could be imposed only by the family. Hierarchies, insofar as they existed, were based on gender, age, experience, and respect within the family.

Studies of modern foraging societies suggest that, although males and females, just like older and younger members of society, may have specialized in different tasks, differences in the roles people played did not necessarily create hierarchical relations. Women probably took most responsibility for child rearing and may also have been responsible for gathering most of the food (at least in temperate and tropical regions, where gathering was more important than hunting), whereas men specialized in hunting, which was generally a less reliable source of food in such regions. However, no evidence indicates that these different roles led to relationships of dominance or subordination. Throughout the era of foragers

For more on these topics, please see the following articles:

Animism p. 90 (v1)

Shamanism p. 1696 (v4)

human relationships were personal rather than hierarchical. In a world of intimate, personal relationships people had little need for the highly institutionalized structures of the modern world, most of which are designed to regulate relationships between strangers.

Burials and art objects of many kinds have left us tantalizing hints about the spiritual world of our foraging ancestors but few definitive answers. Modern analogies suggest that foragers thought of the spiritual world and the natural world as parts of a large extended family, full of beings with whom one could establish relations of kinship, mutual obligation, and sometimes enmity. As a result, the classificatory boundaries that foragers drew between human beings and all other species and entities were less hard and fast than those we draw today. Such thinking may help make sense of ideas that often seem bizarre to moderns, such as totemism—the idea that animals, plants, and even natural geological objects such as mountains and lakes can be thought of as kin. The belief that all or most of reality is animated by spirit may be the fundamental cosmological hypothesis (or model of the universe) of foraging societies, even if particular representations of spirits differ greatly from community to community. The hypothesis helped make sense of a world in which animals and objects often behave with all the unpredictability and willfulness of human beings.

LIVING STANDARDS

In an article published in 1972 the anthropologist Marshall Sahlins questioned the conventional assumption that material living standards were necessarily low in foraging societies. He argued, mainly on the basis of

For more on these topics, please see the following articles:

Disease and Nutrition p. 538 (v2)

Diseases—Overview p. 543 (v2)

Food p. 757 (v2)



Shamanism is a form of religion traced back to the foraging era. This drawing depicts a Siberian Shaman.

health of foragers was often better than that of people in the earliest farming communities. The small communities in which foragers lived insulated them from epidemic diseases, and frequent movement prevented the accumulation of rubbish that could attract disease-carrying pests. Modern analogies suggest that they also lived a life of considerable leisure, rarely spending more than a few hours a day in pursuit of the basic necessities of life—far less than most people either in farming communities or in modern societies. However, we should not exaggerate. In other ways life was undeniably harsh during the era of foragers. For example, life expectancies were probably low (perhaps less than thirty years): Although many persons un-

doubtedly lived into their sixties or seventies, high rates of infant mortality, physical accidents, and interpersonal violence took a greater toll from the young in foraging societies than in most modern societies.

Major Changes during the Era of Foragers

The small size of foraging communities and the limited possibilities for exchanging ideas over large areas may explain why, to modern minds, technological change during this era appears to have been so slow. Nevertheless, change was extremely rapid in comparison with the changes that took place among our hominid (erect bipedal primate mammals comprising recent humans and extinct ancestral and related forms) ancestors or among other large animal species. To give just one example, the Acheulian hand axes (a type of stone tool originating in Africa almost 2 million years ago) used by our immediate ancestors, *Homo ergaster*, changed little during a million and more years. Yet, during the 200,000 years or

evidence from modern foragers, that from some points of view we could view foragers (certainly those living in less harsh environments) as affluent. Nomadism discouraged the accumulation of material goods because people had to carry everything they owned; so did a lifeway in which people took most of what they needed from their immediate surroundings. In such a world people had no need to accumulate material possessions. Absence of possessions may seem a mark of poverty to modern minds, but Sahlins argued that foragers probably experienced their lives as affluent because the things they needed could be found all around them. Particularly in temperate regions, the diets of foragers can be varied and nutritious; indeed, the variety of the diets of ancient foragers shielded them from famine because when their favorite foodstuffs failed, they had many alternatives to fall back on.

LEISURELY BUT BRIEF

Studies by paleobiologists (paleontologists who study the biology of fossil organisms) have confirmed that the

The smallest human societies that we can identify either among living groups or among the populations of prehistory do not live up to the romantic images we sometimes paint of them . . . [but they] do surprisingly well if we compare them to the the actual record of human history rather than to

more of the era of foragers, our ancestors created a remarkable variety of new technologies and new lifeways. Indeed, the relatively sudden replacement of Acheulian stone technologies by more varied and precisely engineered stone tools in Africa from about 200,000 years ago is one of the most powerful reasons for thinking that modern humans existed by that date. Many of these new stone tools were so small that they may have been hafted (bound to handles), which would have greatly increased their versatility and usefulness.

The technological creativity of our foraging ancestors enabled them to explore and settle lands quite different from those in which they had evolved. Indeed, this creativity is one of the most decisive differences between our species and other species, including our closest relatives, the great apes. As far as we know, the great apes have not managed to modify their behaviors enough to migrate into new habitats. This fact is precisely why we do not customarily think of these species as having histories in the way that humans have a history. In contrast, the history of our species during the era of foragers is a story of many unrecorded migrations into new environments, made possible by tiny technological changes, the accumulation of new knowledge and skills, and minor adjustments in lifeways.

As humans spread over more and more of the Earth, human numbers surely increased. Estimates of populations during the era of foragers are based largely on guesswork, but one of the more influential recent estimates by demographer Massimo Livi-Bacci suggests that thirty thousand years ago just a few hundred thousand humans existed, whereas ten thousand years ago there may have been as many as 6 million. If we assume that approximately 500,000 humans existed thirty thousand years ago, this implies a growth rate between thirty thousand and ten thousand years ago of less than 0.01 percent per annum, which implies that human populations

were doubling approximately every eight thousand to nine thousand years. This rate of growth can be compared with an average doubling time of about fourteen hundred years during the agrarian era and eighty-five years during the modern era.

TECHNOLOGICAL CHANGE

Rates of growth during the era of foragers are striking in two contradictory ways. Insofar as population growth is an indirect sign of technological innovation, it provides evidence for innovation throughout the era and some signs that innovation was accelerating. However, by comparison with later eras of human history, rates of growth were extremely slow. This difference is partly because exchanges of information were limited by the small size and the wide dispersion of foraging communities. Indeed, change occurred so slowly that a person could hardly notice it within a single lifetime, and this fact may mean that ancient foragers, like modern foragers, had little sense of long-term change, seeing the past mainly as a series of variations on the present.

Migrations into new environments requiring new technologies and new skills probably began quite early during the era of foragers, while all humans still lived within the African continent. Unfortunately, studying technological change during the earliest stages of human history is difficult because surviving objects tell us little about the technological knowledge of those who made them. Today we depend upon objects such as cars and computers, which embody a colossal amount of specialized knowledge. However, modern anthropological studies suggest that among foragers knowledge was primarily carried in the head rather than embodied in objects. Thus, the tools that foragers left behind can give us only the palest impression of their technological and ecological skills.

Nevertheless, the evidence of change is powerful. The first piece of evidence that humans were migrating into new environments is the fact that human remains start appearing in all parts of the African continent. By 100,000 years ago some groups had learned to live off the resources of seashore environments, such as shellfish; whereas others were adapting to lifeways in other new

For more on these topics, please see the following articles:

Afro-Eurasia p. 44 (v1)

Migrations p. 1247 (v3)

Population p. 1484 (v4)

our romantic images of civilized progress. . . . Hobbes was probably wrong by almost any measure when he characterized primitive life as “nasty, brutish and short” while speaking from the perspective of urban centers of seventeenth-century Europe. • MARK COHEN, MEDICAL ANTHROPOLOGIST

environments, including tropical forests and deserts. Evidence that communities exchanged objects over distances up to several hundred kilometers suggests that communities were also exchanging information over considerable distances, and these exchanges may have been a vital stimulus to technological experimentation.

MIGRATIONS FROM AFRICA

From about 100,000 years ago humans began to settle outside Africa; communities of modern humans existed in southwestern Asia, and from there humans migrated west and east to the southern, and warmer, parts of the Eurasian landmass. These migrations took humans into environments similar to those of their African homeland; thus, they do not necessarily indicate any technological breakthroughs. Indeed, many other species had made similar migrations between Asia and Africa. However, the appearance of humans in Ice Age Australia by forty thousand to fifty thousand years ago is a clear sign of innovation because traveling to Australia demanded sophisticated seagoing capabilities, and within Australia humans had to adapt to an entirely novel biological realm. We know of no other mammal species that made this crossing independently.

Equally significant is the appearance of humans in Siberia from about thirty thousand years ago. To live in the steppes (vast, usually level and treeless tracts) of Inner Asia during the last ice age, you had to be extremely good at hunting large mammals such as deer, horse, and mammoth because edible plants were scarcer than in warmer climates. You also had to be able to protect yourself from the extreme cold by using fire, making close-fitting clothes, and building durable shelters. By thirteen thousand years ago humans had also reached the Americas, traveling either across the Ice Age land bridge of Beringia, which linked eastern Siberia and Alaska, or by sea around the coasts of Beringia. Within two thousand years of en-

tering the Americas, some groups had reached the far south of South America.

Each of these migrations required new technologies, new botanical and biological knowledge, and new ways of living; thus, each represents a technological breakthrough, within which numerous lesser technological adjustments took place as communities learned to exploit the particular resources of each microregion. However, no evidence indicates that the average size of human communities increased. During the era of foragers, technological change led to more extensive rather than more intensive settlement; humans settled more of the world, but they continued to live in small nomadic communities.

HUMAN IMPACTS ON THE ENVIRONMENT

The technological creativity that made these migrations possible ensured that, although foragers normally had a limited impact on their environments, their impact was increasing. The extinction of many large animal species (megafauna) and the spread of what is known as “fire-stick farming” provide two spectacular illustrations of the increasing human impact on the environment, although controversy still surrounds both topics.

Megafaunal Extinctions

Within the last fifty thousand years many species of large animals have been driven to extinction, particularly in regions newly colonized by humans, whether in Australia, Siberia, or the Americas. Australia and the Americas may have lost 70–80 percent of all mammal species weighing more than 44 kilograms; Europe may have lost about 40 percent of large-animal species; whereas Africa, where humans and large mammals had coexisted for much longer, lost only about 14 percent. As archaeologists pinpoint the date of these extinctions more precisely, they appear to coincide with the first arrival of modern

For more on these topics, please see the following articles:

Afro-Eurasia p. 44 (v1)

Asia p. 184 (v1)

Europe p. 691 (v2)

For more on these topics, please see the following articles:

Art, Paleolithic p. 180 (v1)

Extinctions p. 722 (v2)

Fire p. 745 (v2)

Technology—Overview p. 1806 (v5)

By providing a coherent, intelligible account of the past, [history] satisfies a profound human yearning for knowledge about our roots. It requires no justification other than that. • THEODORE S. HAMEROW (B. 1920)

humans, increasing the probability that they were *caused* by humans.

Similar extinctions during recent centuries, such as the extinction of the large birds known as “moas” in New Zealand, offer a modern example of what may have happened as humans with improved hunting techniques and skills encountered large animals who had little experience of humans and whose low reproduction rates made them particularly vulnerable to extinction. The loss of large-animal species in Australia and the Americas shaped the later histories of these regions insofar as the lack of large animals meant that humans were unable to exploit large animals as beasts of burden and sources of foodstuffs and fibers.

Fire-Stick Farming

A second example of the increasing environmental impact of early foragers is associated with what the Australian archaeologist Rhys Jones called “fire-stick farming.” Fire-stick farming is not, strictly, a form of farming at all. However, it is, like farming, a way of manipulating the environment to increase the productivity of animal and plant species that humans find useful. Fire-stick farmers regularly burn off the land to prevent the accumulation of dangerous amounts of fuel. Regular firing also clears undergrowth and deposits ash. In effect, it speeds up the decomposition of dead organisms, which encourages the growth of new shoots that can attract grazing animals and the animals that prey on them.

Humans systematically fired the land on all the continents they settled, and through time the practice probably transformed local landscapes and altered the mix of local animal and plant species. In Australia, for example, fire-stick farming through tens of thousands of years probably encouraged the spread of eucalyptus at the expense of species that were less comfortable with fire, creating landscapes very different from those encountered by the first human immigrants.

PICKING UP THE PACE

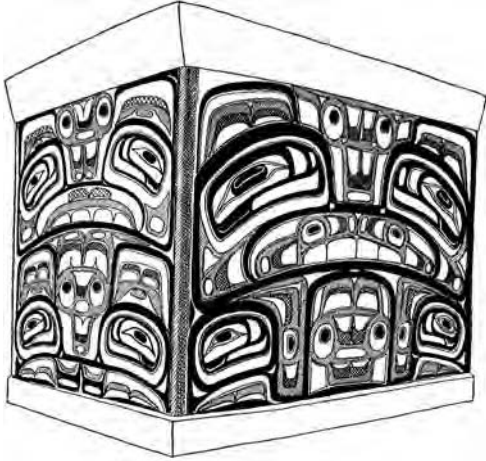
From about fifty thousand years ago the rate of technological change began to accelerate. Migrations to new

continents and new environments are one expression of that acceleration. However, new technologies and techniques also proliferated. Stone tools became more precise and more varied, and many may have been hafted. People made more use of new materials such as bone, amber, and vegetable fibers. From about twenty thousand to thirty thousand years ago, new and more sophisticated tools appeared, including bows and arrows and spear throwers.

Foragers in tundra (level or rolling treeless plain that is characteristic of arctic and subarctic regions) regions used bone needles to make carefully tailored clothes from animal skins; sometimes they covered their clothing with elaborate ornamentation made from animal teeth or shells. The remains of prey species show that hunters, particularly in cold climates, became more specialized in their hunting techniques, suggesting increasingly sophisticated understanding of different environments. Cave paintings and sculptures in wood or bone began to appear in regions as disparate as Africa, Australia, Mongolia, and Europe.

AFFLUENT FORAGERS

Accelerating technological change accounts for one more development that foreshadowed the changes that would eventually lead to the agrarian era. Most foraging technologies can be described as “extensive”: They allowed humans to occupy larger areas without increasing the size of individual communities. Occasionally, though, foragers adopted more intensive techniques that allowed them to extract more resources from a given area and to create larger and more sedentary communities. Evidence for such changes is particularly common from about twenty thousand to fifteen thousand years ago and is best known from the corridor between Mesopotamia (the region of southwestern Asia between the Tigris and Euphrates rivers) and Sudan—the region that links Africa and Eurasia. Anthropologists have long been aware that foragers living in environments of particular abundance will sometimes become less nomadic and spend longer periods at one or two main home bases. They may also become more sedentary if they



Indigenous peoples of the North American northwest subsisted from fishing and exhibited a way of life called affluent foraging. The illustration is of the designs on a large Tsimshian box used to store blankets, an important form of wealth.

devise technologies that increase the output of resources from a particular area. Anthropologists refer to such foragers as “affluent foragers.”

The examples that follow are taken from Australia from a region in which foraging lifeways can be studied more closely because they have survived into modern times. During the last five thousand years new, smaller, and more finely made stone tools appeared in many parts of Australia, including small points that people may have used as spear tips. Some tools were so beautifully made that they were traded as ritual objects over hundreds of miles. New techniques meant new ways of extracting resources. In the state of Victoria people built elaborate eel traps, some with canals up to 300 meters long. At certain points people constructed nets or tapered traps, using bark strips or plaited rushes, to harvest the trapped eels. So many eels could be kept in these eel



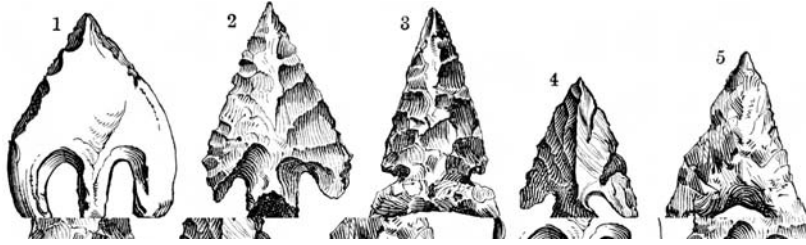
farms that relatively permanent settlements appeared nearby. One site contains almost 150 small huts built of stone. In addition to eels, the inhabitants of these small settlements lived off local species of game, from emu to kangaroo, as well as local vegetable foods such as daisy yam tubers, ferns, and convolvulus (herbs and shrubs of the morning glory family).

Some communities began to harvest plants such as yams, fruit, and grains in ways that suggest early steps towards agriculture. Yams were (and are today) harvested in ways that encouraged regrowth, and people deliberately planted fruit seeds in refuse heaps to create fruit groves. In some of the more arid areas of central Australia, early European travelers observed communities harvesting wild millet with stone knives and storing it in large haystacks. Archeologists have discovered grindstones, which were used to grind seeds as early as fifteen thousand years ago in some regions. In many coastal regions of Australia fishing using shell fishhooks and small boats also allowed for denser settlement. In general, the coasts were more thickly settled than inland areas.

The appearance of communities of affluent foragers prepared the way for the next fundamental transition in human history: the appearance of communities that systematically manipulated their environments to extract more resources from a given area. The set of technologies that these people used is often called “agriculture”; we refer to the era in which agriculture made its appearance as the “agrarian era.”

The Era of Foragers in World History

Historians have often assumed that little changed during the era of foragers. In comparison with later eras of human history this assumption may seem to be true. It is also true that change was normally so slow that it was imperceptible within a single lifetime; thus, few men and women in the era of foragers could have appreciated the wider significance of technological changes. Nevertheless, in comparison with the prehuman era, the pace of technological change during the era of foragers was striking.



A selection of Foraging Era flaked arrowheads from (1) Ireland; (2) France; (3) North America; (4) South America; and (5) Japan.

Exploiting the technological synergy (the creative power generated by linking people through language) that was made available to humans by their capacity for symbolic language, human communities slowly learned to live successfully in a wide variety of new environments. A gradual accumulation of new skills allowed foraging communities to settle most of the world in migrations that have no precedent either among other primate species or among our hominid ancestors.

During the course of 250,000 years the pace of change was slowly accelerating. During the last fifty thousand years or so, the variety and precision of foraging technologies and techniques multiplied throughout the world. Eventually foraging technologies became sophisticated enough to allow groups of people in some regions to exploit their surroundings more intensively, a change that marks the first step toward agriculture.

Further Reading

Burenhult, G. (Ed.). (1993). *The illustrated history of mankind: Vol. 1. The first humans, human origins and history to 10,000 BC*. St. Lucia, Australia: University of Queensland Press.

- Christian, D. (2004). *Maps of time: An introduction to big history*. Berkeley and Los Angeles: University of California Press.
- Fagan, B. M. (2001). *People of the Earth: An introduction to world prehistory* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Flannery, T. (1995). *The future eaters: An ecological history of the Australasian lands and peoples*. Port Melbourne, Australia: Reed Books.
- Flood, J. (1983). *Archaeology of the Dreamtime: The story of prehistoric Australia and her people*. Sydney, Australia: Collins.
- Johnson, A. W., & Earle, T. (2000). *The evolution of human societies* (2nd ed.). Stanford, CA: Stanford University Press.
- Jones, R. (1969). Fire-stick farming. *Australian Natural History*, 16(7), 224–228.
- Klein, R. G. (1999). *The human career: Human biological and cultural origins* (2nd ed.). Chicago: University of Chicago Press.
- Livi-Bacci, M. (1992). *A concise history of world population*. Oxford, UK: Blackwell.
- McBrearty, S., & Brooks, A. S. (2000). The revolution that wasn't: A new interpretation of the origin of modern human behavior. *Journal of Human Evolution*, 39(5), 453–563.
- McNeill, J. R., & McNeill, W. H. (2003). *The human web: A bird's-eye view of world history*. New York: W. W. Norton.
- Richerson, P. T., & Boyd, R. (2004). *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.
- Roberts, N. (1998). *The Holocene: An environmental history* (2nd ed.). Oxford, UK: Blackwell.
- Sahlins, M. (1972). *Stone Age economics*. London: Tavistock.
- Wolf, E. R. (1982). *Europe and the people without history*. Berkeley and Los Angeles: University of California Press.

Acceleration: The Agrarian Era



The agrarian era began ten thousand to eleven thousand years ago with the appearance of the first agricultural communities. We can define the agrarian era as “the era of human history when agriculture was the most important of all productive technologies and the foundation for most human societies.” It ended during the last 250 years as modern industrial technologies overtook agriculture in productivity and began to transform human lifeways. Although the agrarian era lasted a mere ten thousand years, in contrast to the 250,000 years of the era of foragers, 70 percent of all humanity may have lived during the agrarian era, their burgeoning numbers sustained by the era’s productive technologies.

The agrarian era was characterized by greater diversity than either the era of foragers or the modern era. Paradoxically, diversity was a product both of technological innovations and of technological sluggishness because although new technologies such as agriculture and pastoralism (livestock raising) created new ways of living, the limits of communications technologies ensured that different parts of the world remained separate enough to evolve along independent trajectories. At the largest scale we can identify several distinct “world zones,” or regions that had no significant contact with each other before about 1500 CE. The most important were the Afro-Eurasian landmass from the far south of Africa to the far northeast of Siberia, the Americas, Australia, and the islands of the Pacific.

Within each world zone long and sometimes tenuous webs of cultural and material exchanges linked local communities into larger networks of exchanges. In some of the world zones the dense networks of political, cultural,

and economic exchanges known as “agrarian civilizations” emerged, and through time these civilizations linked with other agrarian civilizations and with peoples living between the main zones of agrarian civilization. However, we know of no significant contacts between the different world zones before 1500 CE. The great diversity of lifeways and the relative isolation of different regions explain why we have more difficulty making generalizations that apply to the entire world during this era than during the era of foragers or the modern era.

Despite this diversity, striking parallels exist between the historical trajectories of different parts of the world. Agriculture appeared quite independently in several regions; so did states, cities, monumental architecture, and writing. These parallels raise deep questions about long-term patterns of historical change. Does human history have a fundamental shape, a large trajectory that is apparent in all regions and under diverse social and ecological conditions? If such a shape exists, does it arise from the nature of our species or from basic principles of cultural evolution? Or are the similarities misleading? Do the diversity and open-endedness of human historical experience deserve most emphasis on the large scales of world history?

Origins of Agriculture

The word *agriculture* is used here to describe an evolving cluster of technologies that enabled humans to increase the production of favored plant and animal species. Ecologically speaking, agriculture is a more efficient way than foraging to harvest the energy and resources stored in the natural environment as a result of photosynthesis.

Agriculture represents the single most profound ecological change in the entire 3.5 billion-year history of life. • NILES ELDRIDGE (B. 1943)

Because farmers interfere with their surroundings more deliberately than foragers, agriculture magnified the human impact on the natural environment and also on the cultures and lifeways of humans themselves. Agriculturalists manipulated plant and animal species so intensely that they began to alter the genetic makeup of prey species in a process commonly referred to as “domestication.” By clearing forests, diverting rivers, terracing hillsides, and plowing the land, agriculturalists created landscapes that were increasingly anthropogenic (shaped by human activity).

Finally, by altering their own lifeways, agriculturalists created new types of communities, radically different in scale and complexity from those of the era of foragers. Humans did not domesticate just other species; they also domesticated themselves.

Agriculture does not automatically increase the biological productivity of the land. Indeed, agriculturalists often reduce total productivity by removing the many species for which they have no use. They increase the productivity only of those plants and animals that they find most useful; removing undesired plants leaves more nutrients, sunlight, and water for domesticated crops such as corn, wheat, or rice, while killing wolves and foxes allows cattle, sheep, and chickens to flourish in safety. By increasing the productivity of favored prey species, humans

could feed more of themselves from a given area than would have been possible using foraging technologies.

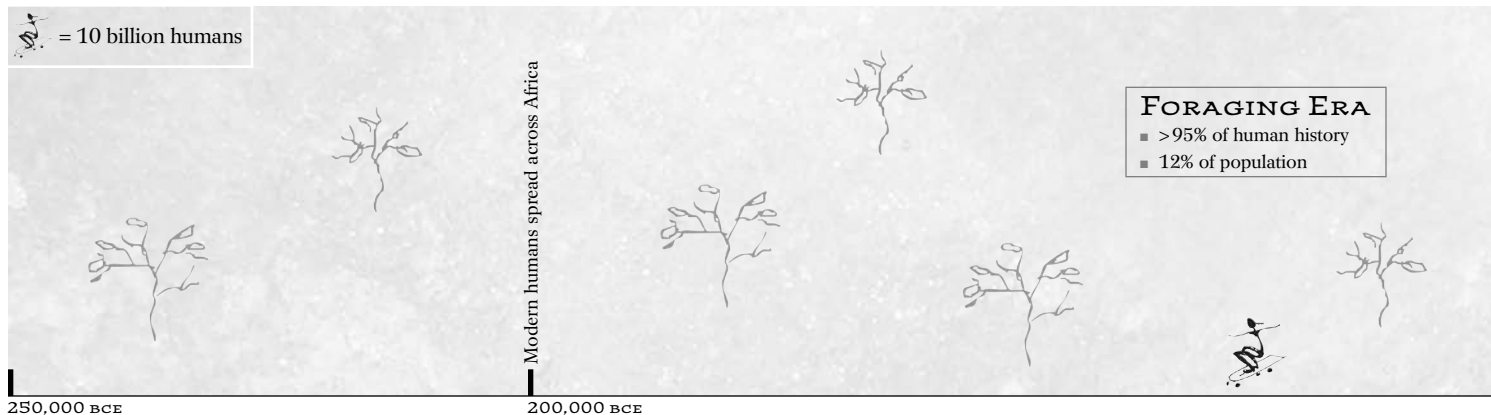
Whereas technological change during the era of foragers was extensive (it allowed humans to multiply by increasing their range), technological change during the agrarian era was intensive (it allowed more humans to live within a given range). As a result, humans and their domesticates began to settle in larger and denser communities; as they did so they transformed their ecological and social environments. The result was a revolution in the pace and nature of historical change.

EARLIEST EVIDENCE OF AGRICULTURE

Dates for the earliest evidence of agriculture remain subject to revision. At present the earliest clear evidence comes from the corridor between Sudan and Mesopotamia that links Africa and Eurasia. In the Fertile Crescent (the arc of highlands around the great rivers of Mesopotamia) grain crops were cultivated from about 8000 BCE (ten thousand years ago). In the Sahara Desert west of the Nile River, in lands that then were much less arid than they are today, communities may have domesticated cattle as early as 9000 or 8000 BCE, and within a thousand years these same communities may have started cultivating sorghum. In west Africa yam cultivation may also have begun around 8000 BCE. In China people were

250,000 Years of Human History

(NOT DRAWN TO SCALE)



Key Events in the Agrarian Era

13,000– 11,000 BCE	Some humans begin to live in settled communities.
9000– 8000 BCE	Cattle are domesticated in the Sahara region of Africa.
8000 BCE	Grain crops are cultivated in Mesopotamia. Yams are cultivated in West Africa.
7000 BCE	Grains and rice are cultivated in the north and south of China. Yams and taro are cultivated in Papua New Guinea. Squash is cultivated in Mesoamerica.
4000 BCE	The secondary products revolution takes place in parts of Afro-Eurasia.
3000 BCE	Plants are cultivated in the Andes region of South America. Cities and states appear in Mesopotamia and Egypt.
2500 BCE	Cities and states appear in India, Pakistan and northern China.
2000 BCE	Eurasian trade networks develop.
1000 BCE	Cities and states appear in Mesoamerica and the Andes.
500 BCE– 1000 CE	New cities and states emerge, population increases, and interregional trade networks develop.
500–1200 CE	Many of the Pacific islands are settled.
1200 CE	Europeans reach the Americas.
1500 CE	All major world regions are linked through migration and trade.
1750 CE	The Agrarian Era begins to decline with the appearance and spread of industrialization.

MODERN ERA

- < 1% of human history
- 68% of population

AGRARIAN ERA

- 4% of human history
- 20% of population

Modern humans in Eurasia

100,000 BCE

Modern humans in Australia

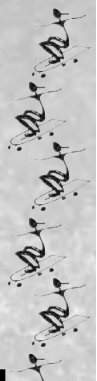
40,000 BCE

Modern humans in Americas

12,000 BCE

0

1750 CE



In truth, the historian can never get away from the question of time in history: time sticks to his thinking like soil to a gardener's spade. • FERNAND BRAUDEL (1902–1985)

For more on these topics, please see the following articles:

Andean States p. 86 (v1)

China p. 332 (v1)

Egypt, Ancient p. 629 (v2)

Mesoamerica p. 1230 (v3)

Mesopotamia p. 1235 (v3)

probably cultivating rice in the south and other grains in the north by 7000 BCE. By this time farming based on the cultivation of taro (a large-leaved tropical Asian plant) and yam evidently existed in Papua New Guinea in the Malay Archipelago. Communities probably farmed root crops early in many coastal communities in the tropics, although most traces of such communities would have been submerged as sea levels rose at the end of the last ice age. In Mesoamerica (the region of southern North America that was occupied during pre-Columbian times by peoples with shared cultural features) people probably domesticated squash as early as 7000 BCE, but clearer evidence of systematic agriculture does not appear before 5000 BCE; in the Andes region the earliest evidence comes after about 3000 BCE. From these and perhaps a few other regions in which agriculture appeared quite independently, agricultural technologies and ways of life eventually spread to most of the world.

At present we lack a fully satisfactory explanation for the origins of agriculture. Any explanation must account for the curious fact that, after 200,000 years or more during which all humans lived as foragers, agricultural lifestyles appeared within just a few thousand years in parts of the world that had no significant contact with each other. The realization that agriculture arose quite independently in different parts of the world has undermined the once-fashionable view that agriculture was a brilliant invention that diffused from a single center as soon as people understood its benefits. That view was also undermined after researchers realized that foragers who know about agriculture have often preferred to remain foragers. Perhaps foragers resisted change because the health and nutritional levels of the first farmers were often lower than those of neighboring foragers, whereas their stress levels were often higher. If agriculture depressed liv-

ing standards, then an explanation of the origins of agriculture must rely more on “push” than on “pull” factors. Rather than taking up agriculture willingly, we must assume that many early agriculturalists were forced to take it up.

AFFLUENT FORAGERS

The outlines of such an explanation are now available, even if many details remain to be tested in particular instances. The origins of agriculture have been studied most thoroughly in Mesopotamia and in Mesoamerica. In both areas the first agricultural villages appeared after many centuries during which foragers intensified their exploitation of particular favored resources, adapting their tools and techniques with increasing precision and efficiency to local environments. This was the first step towards agriculture. When taken far enough, such techniques can turn conventional foragers into what anthropologists call “affluent foragers.” Affluent foragers extract more resources from a given area than traditional foragers. Eventually they may extract enough resources to become semisedentary, living in one place for much of the year. This development is particularly likely where prey resources such as fish or wild grains are unusually abundant. The appearance of such communities in many parts of the world toward the end of the last ice age tempts us to link such changes with the erratic global warming that began sixteen thousand to eighteen thousand years ago.

In both temperate and tropical zones warmer climates may have created local “gardens of Eden”—regions of exceptional abundance—where highly nutritious plants such as wild wheats that had once been scarce thrived and spread. Indeed, intensive agriculture may have been impossible under the harsh conditions of the last ice age; if so, the end of the last ice age was a crucial enabling feature, making agriculture possible for the first time in perhaps 100,000 years.

For more on these topics, please see the following articles:

Carrying Capacity p. 297 (v1)

Foraging Societies, Contemporary p. 764 (v2)

Indigenous Peoples p. 963 (v3)



The end of the last ice age also coincided with the final stages of the great global migrations of the era of foragers. As the anthropologist Mark Cohen has pointed out, by the end of the last ice age few parts of the world were unoccupied, and some parts of the world may have been overpopulated, at least by the standards of foragers. Perhaps the coincidence of warmer, wetter, and more productive climates with increasing population pressure in some regions explains why, in several parts of the world beginning ten thousand to eleven thousand years ago, some communities of foragers began to settle down. The classic example of this change comes from the Natufian communities of the fertile highlands around Mesopotamia fourteen thousand to twelve thousand years ago. Natufian communities were largely sedentary but lived as foragers, harvesting wild grains and gazelle. Similar communities, harvesting wild sorghum, may have existed even earlier in modern Ethiopia, east of the Nile River.

FULL-BLOWN AGRICULTURE

Eventually some sedentary or semisedentary foragers became agriculturalists. The best explanation for this second stage in the emergence of agriculture may be demographic. As mentioned earlier, modern studies of nomadic foragers suggest that they can systematically limit population growth through prolonged breast feeding (which inhibits ovulation) and other practices, including infanticide and senilicide (killing of the very young and the very old, respectively). However, in sedentary communities in regions of ecological abundance such restraints were no longer necessary and may have been relaxed. If so, then within just two or three generations sedentary foraging communities that had lived in regions of abundance for a generation or two may have found that they were outstripping available resources once again.

Overpopulation would have posed a clear choice: Migrate or intensify (produce more food from the same area). Where land was scarce and neighboring communities were also feeling the pinch, people may have had no choice at all; sedentary foragers had to intensify. However, even those foragers able to return to their tra-

For more on these topics, please see the following articles:

Agricultural Societies p. 52 (v1)

Cereals p. 321 (v1)

Population p. 1484 (v4)

Water Management p. 2036 (v5)

ditional, nomadic lifeways may have found that in just a few generations they had lost access to the lands used by their foraging ancestors and had also lost their traditional skills as nomadic foragers. Those communities that chose to intensify had to apply already-existing skills to the task of increasing productivity. They already had much of the knowledge they needed: They knew how to weed, how to water plants, and how to tame prey species of animals. The stimulus to apply such knowledge more precisely and more systematically was provided by overpopulation, whereas global warming made intensification feasible.

These arguments appear to explain the curious near-simultaneity of the transition to agriculture at the end of the last ice age. They also fit moderately well what is known of the transition to agriculture in several regions, particularly temperate regions where agriculture was based primarily on grains. They also help explain why, even in regions where developed agriculture did not appear, such as Australia, many of the preliminary steps toward agriculture do show up in the archaeological record, including the appearance of affluent, semisedentary foragers.

SEEDS OF CHANGE

After agriculture had appeared in any one region, it spread, primarily because the populations of farming communities grew much faster. Although agriculture may have seemed an unattractive option to many foragers, farming communities usually had more resources and more people than foraging communities. When conflict occurred, more resources and more people usually meant that farming communities also had more power. Agriculture spread most easily in regions that bordered established agricultural zones and that had similar soils, climates, and ecologies. Where environmental conditions were different, the spread of agriculture had to await

new techniques such as irrigation or new crops better adapted to the regions of new settlement.

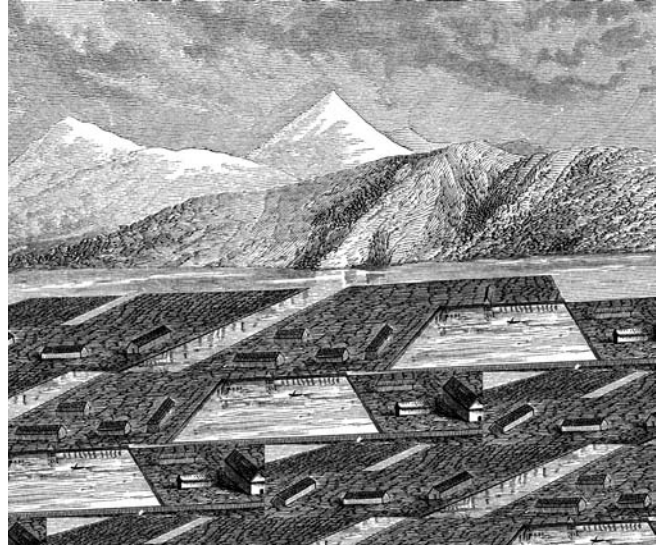
Such changes are apparent, for example, as agriculture spread from southwestern Asia into the cooler and usually wetter environments of eastern, central, and northern Europe or as maize cultivation spread northward from Mesoamerica, a process that depended in part on subtle genetic changes in local varieties of maize. Where new techniques were not available, foragers survived much longer, and the spread of agriculture could be checked, sometimes for thousands of years, as it was at the edge of the Eurasian steppes, which were not brought into cultivation until modern times. Usually agriculture spread through a process of budding off as villages became overpopulated and young families cleared and settled suitable land beyond the borders of their home villages.

General Characteristics and Long Trends

Agricultural communities share important characteristics that give the agrarian era an underlying coherence despite its extraordinary cultural diversity. These characteristics include societies based on villages, demographic dynamism, accelerated technological innovation, the presence of epidemic disease, new forms of power and hierarchy, and enduring relations with nonagrarian peoples.

VILLAGE-BASED SOCIETIES

At the base of all agrarian societies were villages, more or less stable communities of farming households. Although the crops, the technologies, and the rituals of villagers varied greatly from region to region, all such peasant communities were affected by the annual rhythms of harvesting and sowing, the demands of storage, the need for



This drawing shows what an ancient lake-dweller community in Denmark might have looked like.

cooperation within and among households, and the need to manage relations with outside communities.

DEMOGRAPHIC DYNAMISM

The increased productivity of agriculture ensured that populations grew much faster than they had during the era of foragers. Rapid population growth ensured that villages and the technologies that sustained them would eventually spread to all regions in which agriculture was viable. Modern estimates suggest that during the agrarian era world populations rose from 6 million ten thousand years ago to 770 million in 1750. Although these figures hide enormous regional and chronological differences, they are equivalent to an average growth rate of approximately 0.05 percent per annum; on average, populations were doubling every fourteen hundred years. This rate can be compared with doubling times of eight thousand to nine thousand years during the era of foragers and approximately eighty-five years during the modern era.

For more on these topics, please see the following articles:

Agricultural Societies p. 52 (v1)

Carrying Capacity p. 297 (v1)

Disease and Nutrition p. 538 (v2)

Diseases—Overview p. 543 (v2)

Diseases, Animal p. 551 (v2)

Diseases, Plant p. 558 (v2)

Long Cycles p. 1160 (v3)

Matriarchy and Patriarchy p. 1218 (v3)

Population p. 1484 (v4)

Secondary-Products Revolution p. 1680 (v4)

Water Management p. 2036 (v4)

ACCELERATED TECHNOLOGICAL INNOVATION

Local population pressure, expansion into new environments, and increasing exchanges of ideas and goods encouraged many subtle improvements in agricultural techniques. Most improvements arose from small changes in the handling of particular crops, such as earlier or later planting, or the selection of better strains. However, on a broader scale, increased productivity arose from whole clusters of innovation that appeared in many environments. Swidden agriculturalists cleared forest lands by fire and sowed crops in the ashy clearings left behind; after a few years, when the soil's fertility was exhausted, they moved on. In mountainous areas farmers learned how to cultivate hillsides by cutting steplike terraces.

Secondary-Products Revolution

One of the most important of these clusters of innovation had its primary impact only in the Afro-Eurasian world zone: The archaeologist Andrew Sherratt has called it the "secondary-products revolution." From about 4000 BCE a series of innovations allowed farmers in Afro-Eurasia to make more efficient use of the secondary products of large livestock—those products that could be exploited without slaughtering the animals. Secondary products include fibers, milk, manure for fertilizer, and traction power to pull plows, carry people, and transport goods. In arid regions, such as the steppes of Eurasia, the deserts of southwestern Asia, or the savanna lands of east Africa, the secondary-products revolution generated the entirely new lifeway of pastoralism as entire communities learned to live off the products of their herds. Unlike members of the farming communities that were most typical of the agrarian era, pastoralists were usually nomadic because in the dry grasslands in which pastoralism flourished livestock had to be moved constantly to provide them with enough feed.

However, the main impact of the secondary-products revolution was in farming areas, where horses, camels, and oxen could be used to pull heavy plows and to transport goods and humans. The domestication of llamas meant that South America had some experience of the secondary-products revolution, but its major impact was

The "Secondary-Products" Revolution

As illustrated by the excerpt below from the University of Oxford website, the "secondary-products" revolution is a theory that continues to be tested on artifacts dating back more than 6,000 years.

The first [project] involves the participation of Professor Andrew Sherratt of the School of Archaeology of the University of Oxford and curator of the European prehistoric collections in the Ashmolean Museum. It was he who suggested that the first domestic animals may have been used not for their "secondary products" (milk, wool, hair and traction), but for meat, and that milking and the exploitation of other secondary animal products became part of prehistoric farming practices only around 4000 BCE. This socio-economic transition helped promote social evolutionary changes such as the birth of pastoral nomadic communities, the emergence of the Mediterranean farming economy and the rise of complex State-level societies.

The Oxford Levantine Archaeology laboratory has provided pottery sherds from vessels found in Israel's Negev desert dating from c. 4500–4000 BCE to test Sherratt's "secondary-products-revolution" hypothesis by analysing residues for evidence of milk. The samples are currently being tested in Professor Richard Evershed's Biogeochemistry Research Centre at the University of Bristol.

Source: Oxford Centre for Hebrew and Jewish Studies. (2004). Retrieved September 8, 2004, from <http://users.ox.ac.uk/~ochjs/levantine.html>

felt in the Afro-Eurasian world zone because most potential domesticates had been driven to extinction in the Americas during the era of foragers. Many of the critical differences between the histories of Afro-Eurasia and the Americas may depend, ultimately, on this key technological difference.

Just Add Water

The techniques of water management known collectively as "irrigation" had an even greater impact on agricultural

Terracing

Terraced fields snaking up hillsides are spectacular sights and major tourist attraction in Southeast Asian nations such as the Philippines and Indonesia. Some of the terraces have been maintained for over 2000 years. The following extract describing the types of terraces built by the Ifugao ethnic group of the northern Philippines indicates that terracing is more complex than it appears from a distance.

Habal “swidden” (slope field, camote field, kaingin). Slopeland, cultivated and often contour-ridged (and especially for sweet potatoes). Other highland dry-field crops (including taro, yams, manioc, corn, millet, mongo beans, and pigeon peas, but excluding rice except at elevations below 600–700 meters (2,000 feet) above sea level) are also cultivated in small stands or in moderately intercropped swiddens. Boundaries remain discrete during a normal cultivation cycle of several years. When fallow, succession is usually to a canegrass association. . . .

lattan “house terrace” (settlement, hamlet terrace, residential site). Leveled terrace land, the surface of which

is packed smooth or paved but not tilled; serving primarily as house and granary yards, work space for grain drying, and so forth; discrete, often fenced or walled, and named. . . .

qilid “drained field” (drained terrace, ridged terrace). Leveled terrace land, the surface of which is tilled and ditch mounded (usually in cross-contour fashion) for cultivation and drainage of dry crops, such as sweet potatoes and legumes. Drained fields, though privately owned, are kept in this temporary state for only a minimum number of annual cycles before shifting (back) to a more permanent form of terrace use. . . .

payo “pond field” (bunded terrace, rice terrace, rice field). Leveled farmland, bunded to retain irrigation water for shallow inundation of artificial soil, and carefully worked for the cultivation of wet-field rice, taro, and other crops; privately owned discrete units with permanent stone markers; the most valued of all land forms.

Source: Conklin, H. C. (1967–68). Some Aspects of Ethnographic Research in Ifugao. *New York Academy of Sciences, Transactions*, ser. 2, 30, 107–108.

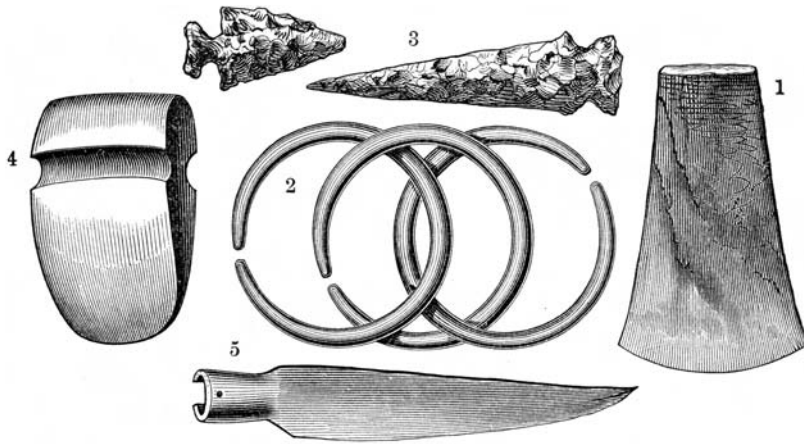
productivity. Irrigation farmers diverted small streams onto their fields, created new farm land by filling swamps with soil and refuse, or built systematic networks of canals and dams to serve entire regions. People practiced irrigation of some kind in Afro-Eurasia, in the Americas, and even in Papua New Guinea and the Pacific. Its impact was greatest in arid regions with fertile soils, such as the alluvial basins (regions whose soils were deposited by running water) of Egypt, Mesopotamia, the northern regions of the Indian subcontinent, northern China, and the lowlands of the Andean region. In these regions irrigation agriculture led to exceptionally rapid population growth.

As agriculture spread and became more productive, it supported larger, denser, and more interconnected communities. Within these communities population pressure and increasing exchanges of information generated a steady trickle of innovations in building, warfare, record keeping, transportation and commerce, and science and the arts. These innovations stimulated further demographic growth in a powerful feedback cycle that explains

why change was so much more rapid during the agrarian era than during the era of foragers. Yet, innovation was rarely fast enough to keep up with population growth. This lag explains why, on the scale of decades or even centuries, all agrarian societies experienced cycles of expansion and collapse that obscured the underlying trend toward growth. These cycles underlay the more visible patterns of political rise and fall, commercial boom and bust, and cultural efflorescence (blooming) and decay that have so fascinated historians. (Such patterns of growth and decline can be described as “Malthusian cycles,” after Thomas Malthus, the nineteenth-century English economist who argued that human populations will always rise faster than the supply of food, leading to periods of famine and sudden decline.)

EPIDEMIC DISEASES

Population growth could be slowed by epidemic diseases as well as by low productivity. Foraging communities were largely free of epidemic diseases because they were



A selection of stone and bronze implements recovered from agrarian era state-level centers in Mesoamerica. (1) axe; (2) bracelets; (3) arrow points; (4) stone axe; and (5) bronze knife.

small and mobile, but farming communities created more favorable environments for pathogens (causative agents of disease). Close contact with livestock allowed pathogens to move from animals to humans, accumulations of rubbish provided fertile breeding grounds for diseases and pests, and large communities provided the abundant reserves of potential victims that epidemic diseases need to flourish and spread. Thus, as populations grew and exchanges between communities multiplied, diseases traveled more freely from region to region. Their impact took the form of a series of epidemiological decrescendos that began with catastrophic epidemics and were followed by less disastrous outbreaks as immune systems in region after region adapted to the new diseases.

As the historian William McNeill has shown, long-range epidemiological exchanges within the Afro-Eurasian world zone immunized the populations of this zone against a wide range of diseases to which populations in other world zones remained more vulnerable. Trans-Eurasian epidemiological exchanges may help explain the slow growth of much of Eurasia during the first millennium CE; they may also explain why, once the world was united after 1500 CE, epidemiological exchanges had a catastrophic impact on regions outside Afro-Eurasia.

HIERARCHIES OF POWER

In many tropical regions people harvested root crops piecemeal as they were needed. However, in regions of grain farming, such as southwestern Asia, China, and Mesoamerica, plants ripened at the same time; thus, entire crops had to be harvested and stored in a short period. For this reason grain agriculture required people, for the first time in history, to accumulate and store large

surpluses of food. As villages of grain farmers multiplied and their productivity rose, the size of stored surpluses grew. Conflicts over control of these increasingly valuable surpluses often triggered the emergence of new forms of inequality and new systems of power.

Stored surpluses allowed communities for the first time to support large numbers of nonfarmers: specialists such as priests, potters, builders, soldiers, or artists who did not farm but rather supported themselves by exchanging their products or services for foodstuffs and other goods. As farmers and nonfarmers exchanged goods and services, a complex division of labor appeared for the first time in human history. Specialization increased interdependence between households and communities and tightened the webs of obligation and dependence that bound individuals and communities together. Eventually surpluses grew large enough to support elite groups whose lives depended primarily on their ability to control and manage the resources produced by others, either through exchanges of goods and services or through the threat of force. Human societies became multilayered as some groups began to specialize in the exploitation of other men and women, who exploited farmers, who exploited the natural environment. William McNeill has called these elite groups “macroparasites,” whereas the anthropologist Eric Wolf has called them “tribute takers.”

RELATIONS WITH NONAGRARIAN COMMUNITIES

Finally, the agrarian era was characterized by complex relations between agrarian communities and other types of communities. Throughout this era pastoralists and foragers living outside the main agricultural regions continued to have a significant impact on agrarian communities

by mediating exchanges between agrarian regions and sometimes by introducing technologies (such as the many technologies associated with pastoralism, from improved saddles to improved weaponry) or by trading valued goods such as furs or ivory or feathers.

Agrarian Communities before Cities: 8000–3000 BCE

The *early* agrarian era is that time when agrarian communities existed, but no large cities or states. In Afro-Eurasia this time extended from about 8000 BCE until about 3000 BCE, when the first cities emerged; in the Americas this time began later and lasted longer, and in parts of the Australasian and Pacific world zones it lasted until modern times.

A WORLD OF VILLAGES

During the early agrarian era villages were the largest communities on Earth and the most important sources of demographic and technological dynamism. In today's world, in which villages are marginal demographically, technically, culturally, and politically, we could all too easily forget the crucial historical role that villages played for many millennia. During the early agrarian era most villages practiced forms of agriculture that anthropologists might refer to as "horticulture" because they depended mainly on the labor of humans (and particularly of women, if modern analogies can be relied on), whereas their main agricultural implements were digging sticks of many kinds. However, these communities also pioneered important innovations such as irrigation and terracing, which eventually allowed the appearance of more populous communities. Thus, villages accounted for much of the demographic and geographical expansion of the agrarian world through many thousands of years.

EMERGENCE OF HIERARCHY

Within the villages of the early agrarian era men and women first encountered the revolutionary challenges posed by the emergence of larger, denser, and more hierarchical communities. As communities became larger,



people had to find new ways of defining their relationships with neighbors, determining who had access to stored resources, administering justice, and organizing warfare, trade, and religious worship. As specialization spread, communities had to find ways of regulating exchanges and conflicts between persons whose interests and needs were increasingly diverse. The simple kinship rules that had provided all the regulation necessary in small foraging communities now had to be supplemented with more elaborate rules regulating behavior between people whose contacts were more anonymous, more fleeting, and less personal. Projects involving entire communities, such as building temples, building canals, and waging warfare, also required new types of leadership.

The archaeological evidence shows how these pressures, all linked to the growing size of human communities, led to the creation of institutionalized political and economic hierarchies, with wealthy rulers, priests, and merchants at one pole and propertyless slaves or vagrants at the other pole. Archaeologists suspect the presence of institutionalized hierarchies wherever burials or residences begin to vary greatly in size within a community. Where children were buried with exceptional extravagance, we can be pretty sure that emerging hierarchies were hereditary, so parents could pass their status on to

The agrarian era was marked by more permanent settlements and accompanying graveyards. This photo is of the remains of a stone burial mound in Scotland.

their children. Where monumental structures appeared, such as the statues on Easter Island in the Pacific Ocean or giant stone circles such as Stonehenge in Britain, we can be certain that leaders existed with enough power to organize and coordinate the labor of hundreds or thousands of persons.

EARLY GLASS CEILING

Gender hierarchies may have been among the earliest forms of institutionalized hierarchies. As members of households established more complex relationships with outsiders, they came under the influence of new rules, structures, and expectations. An emerging division of labor also created new opportunities outside the household and the village. Yet, in a world where the economic and social success of each household depended on bearing and rearing as many children as possible, women usually had fewer opportunities to take on more specialized roles—some of which brought great wealth and power. The linguist and archaeologist Elizabeth Barber has argued that this fact may explain why men were more likely to occupy high-ranking positions in emerging hierarchies. Warfare may also have changed gender relations as population growth intensified competition between communities and as men began to monopolize the organization of violence.

Whatever the cause, the disproportionate presence of men in external power structures reshaped relations and attitudes within the village and the household. Men began to claim a natural superiority based on their role in emerging power structures outside the household, and women were increasingly defined by their role within the household and their relationships to men. Even the many women who earned money outside the household usually did so in jobs associated with the tasks of the household. Within the household the demands of peasant life ensured that men and women continued to work in partnership. At this intimate, domestic scale relationships owed as much to personal qualities as to gender. However, beyond the household the powerful web of cultural expectations and power relations now known as “patriarchy” emerged.



LEADERS AND LEADERSHIP

Hierarchies of power shaped many other relationships as local communities were drawn into wider networks of exchange. In these larger networks traditional kinship thinking no longer worked. Genealogies began to take on semifictional forms that allowed entire communities to claim descent from the same, often mythical ancestor. Such genealogies could generate new forms of hierarchy by ranking descent groups according to their exact relationship to the founder. Where descendants of senior lines claimed higher status, aristocracies began to appear. However, when people chose leaders, ability usually counted for as much as birth. Where high-born people lacked leadership skills, persons with more talent as conciliators, warriors, or mediators with the gods were chosen to support or replace them. Most simple forms of leadership derived from the needs of the community; thus, they depended largely on popular consent. This consent made early power structures fragile because the power of leaders could evaporate all too easily if they failed in the tasks for which they were chosen.

However, as communities expanded, the resources available to their leaders increased until leaders began to set aside a share of those resources to support specialist enforcers or rudimentary armies. In this way leaders whose power originated in the collective needs of their subjects eventually acquired the ability to coerce at least some of those they ruled and to back up the collection of resources and the control of labor with the threat of force. The details of such processes are largely hidden from us, although archaeological evidence and anthropological research can give us many hints of how some of these processes played out in particular communities. These processes prepared the way for the more powerful political structures that we know as “states.” States appeared in

**A carving of Kaban-Puuc,
the ancient Mayan god of
maize (corn) and rain.**

parallel with the large, sedentary communities we know as “cities.”

**The Earliest Cities and
States: 3000 BCE–500 BCE**

For those people who define history as “the study of the past through written records,” the period from 3000 BCE to 500 BCE was when history truly began because this was when the first written documents appeared in the two largest world zones: Afro-Eurasia and the Americas. From the perspective of world history this period marked a new stage in the complexity and size of human communities. In Afro-Eurasia, the largest and most populous of all world zones, the first cities and states appeared about 3000 BCE. In the Americas they appeared more than two thousand years later, in Mesoamerica and Peru. In the Australasian zone neither cities nor states appeared during the agrarian era; but in the Pacific zone embryonic states emerged on islands such as Tonga or Hawaii within the last thousand years.

If a single process accounts for the emergence of the first cities and states, it is increasing population density. The earliest cities and states appeared where people were most closely packed together, often because of the rapid expansion of irrigation agriculture. Sudden increases in population density intensified all the problems of coordination and control posed by large communities and

For more on these topics, please see the following articles:

- Andean States p. 86 (v1)
 - Babylon p. 229 (v1)
 - China p. 332 (v1)
 - Egypt, Ancient p. 629 (v2)
 - Harappan State and Indus Civilization p. 889 (v3)
 - Mesoamerica p. 1230 (v3)
 - Mesopotamia p. 1235 (v3)
 - Pacific, Settlement of p. 1406 (v4)
 - Sumerian Society p. 1796 (v4)
 - Trading Patterns, Ancient American p. 1848 (v5)
 - Trading Patterns, Ancient European p. 1852 (v5)
 - Trading Patterns, Mesoamerican p. 1874 (v5)
 - Writing Systems and Materials p. 2095 (v5)
-



greatly increased the need for specialist leaders. Rapid growth also multiplied the resources available to leaders. Thus, by and large the earliest cities appeared at about the same time as the earliest states. Cities can be defined as “large communities with a complex internal division of labor.” (In contrast, villages, and even some early towns, such as the town of Catalhuyuk in Turkey, which dates from 6000 BCE, normally consisted of roughly similar households, mostly engaged in agriculture, with limited hierarchies of wealth and little specialization of labor.) States can be defined as “power structures that rest on systematic and institutionalized coercion as well as on popular consent.”

Cities and states appeared as part of a larger cluster of social innovations, all of which were linked to the increasing scale and complexity of human societies in regions of highly productive agriculture. These innovations included the organization of specialized groups of officials and soldiers, writing, coercive forms of taxation, and monumental architecture.

AFRO-EURASIA AND THE AMERICAS

Because such an intimate connection existed between agricultural intensification and the appearance of cities and states, we should not be surprised that the earliest evidence for cities and states comes from regions with ancient agricultural traditions. The earliest clear evidence for communities large enough to be called “cities” and powerful enough to be called “states” comes from the ancient corridor from Sudan to Mesopotamia that links Africa and Eurasia. Some of the earliest states appeared

Documenting a Neolithic Settlement in the Electronic Age

Since 1993, an international team of archaeologists has been excavating the ancient city of Catalhoyuk in present-day Turkey, resuming an effort first begun in the 1960s. In an effort to bring alive the 9,000-year-old artifacts being found at the Catalhoyuk “dig,” team member Rebecca Daly maintains a weblog (blog) on the excavation website. Below is her entry for 28 July 2004.

Bleda is beginning the burial that was next to the sheep today, which thrills both of us, because we both suspect that there is some incredible stuff in that burial. There are a lot of burials coming out now, the human remains lab are tearing their hair out trying to get everything done. Just when they think they're going to catch up, more things appear! Sure enough, Bleda has come up with an interesting bird bone thing that both he and Lori, who's from the human

remains lab doing the burial, think is a flute. It's certainly the right shape, and it has had both of the ends knocked off which suggests they wanted to use the inside for something. I have high hopes, Bleda seems to attract the interesting objects. It would be really amazing if this is actually a flute of some sort, it would be the earliest musical instrument. The burial was sprinkled with ochre both under and over it, which suggests that it was a really important part of the burial process in this case. This was obviously a very significant burial anyway, what with the whole lamb, but this makes it even more so—there is some suggestion of the order in which the burial activities took place.

Source: Mysteries of Catalhoyuk. (2004). Retrieved September 8, 2004, from <http://lcs.mmm.org/catal/updates/>

during the centuries before 3000 BCE in southern Mesopotamia in the region known to archaeologists as “Sumer” and also along the Nile River in modern Egypt and Sudan. During the next thousand years evidence of cities and states appeared also in the Indus River valley in modern Pakistan and in northern China.

In the Americas we can trace a similar pattern of evolution from villages toward cities and states, but the earliest evidence for both changes came much later. Although large communities and powerful leaders existed in Mesoamerica in the lands of the Olmecs (in Mexico's southern gulf coast) by the second millennium BCE, most archaeologists would argue that the first true cities and states in the Americas appeared late during the first millennium BCE, in regions such as the Oaxaca Valley or farther south in the heartland of Mayan civilization. In the Andes, too, statelike communities, such as the Moche culture, appeared at the end of the first millennium BCE.

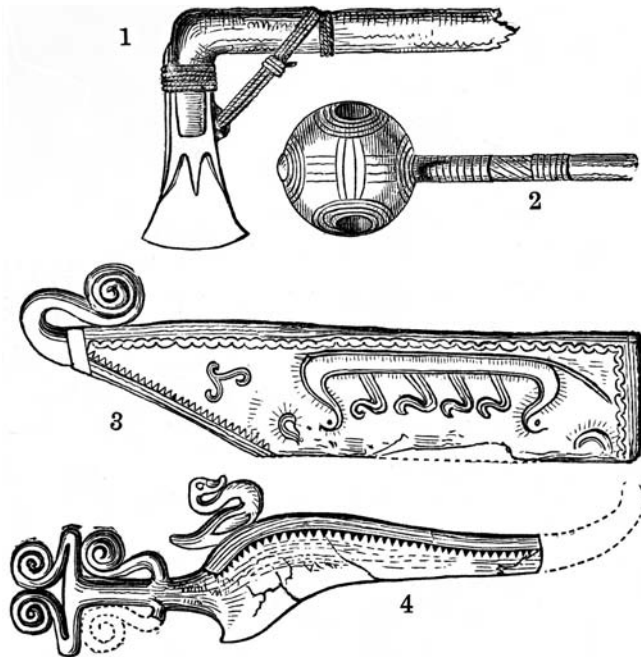
AGRARIAN CIVILIZATIONS

From these and other core areas the traditions of early statehood spread to adjacent regions as populations expanded and networks of material and cultural exchanges knit larger regions together, generating greater

concentrations of wealth and power. As they spread, states carried with them a core set of institutions and practices associated with what are often called “agrarian civilizations.” Directly or indirectly, the spread of agrarian civilizations reflected the increasing scale and density of human populations. Cities were simply the most concentrated and largest of all human communities. States were the large, coercive power structures that were necessary to administer and defend city-scale communities, and they were funded by the large concentrations of wealth found in cities and their hinterlands.

Collecting that wealth by force often began with crude forms of looting that eventually turned into the more formalized looting that we call “taxation.” Managing large stores of wealth required new forms of administration and new forms of accounting; indeed, in all emerging states writing apparently emerged first as a technique to keep track of large stores of wealth and resources. Even in the Inca state, where no fully developed system of writing emerged, rulers used a system of accounting based on intricately knotted strings (quipu).

Defending large concentrations of wealth and maintaining order within and between cities and city-states (autonomous states consisting of a city and surrounding



This drawing shows four progressively more intricate European bronze implements: (1) a hand axe with wooden handle; (2) decorated hair pin; (3) razor knife blade; and (4) curved knife blade.

in transportation and communications, such as the appearance of wheeled vehicles in Afro-Eurasia during the second millennium BCE, extended the reach of states, their officials, and their armies.

However, their influence reached much further than their power, as traders bridged the gaps between states, creating large networks of commercial and cultural exchange. Indeed, some experts have claimed that as early as 2000 BCE exchanges along the Silk Roads connecting China and the Mediterranean had already created a single, Eurasiawide system of exchanges.

As impressive as these large and powerful communities were, we should remember the limits of their power and influence. Few agrarian states took much interest in the lives of their citizens as long as they paid taxes. Maintaining law and order outside of the major cities was usually left to local power brokers of various kinds. Huge regions also lay beyond the direct control of imperial rulers. The scholar Rein Taagepera has estimated that early during the first millennium BCE states still controlled no more than about 2 percent of the area controlled by states today. Beyond this tiny area, which probably included most of the world's population, smaller communities of foragers, independent farmers, and pastoralists existed.

Although agrarian civilizations usually regarded these outside communities as barbarians, they could play a crucial role in providing sources of innovation and in linking agrarian civilizations. For example, steppe pastoralists in Eurasia transported religious ideas, metallurgical traditions, and even goods between China, India, and the Mediterranean world, and they may also have pioneered some of the military and transportation technologies of agrarian civilizations, such as the wheeled chariot. The most innovative naval technologies of this period were found in the western Pacific, where peoples of the Lapita culture, using huge double-hulled canoes, settled a vast area from New Guinea to Fiji and Tonga between 3000 and 1000 BCE.

Long-term growth in the number, size, and power of cities and states reflected not only innovations in statecraft and warfare, but also the sustained demographic

territory) required the creation of armies. In Sumer and elsewhere invading armies possibly established the first states, and certainly all early states engaged enthusiastically in warfare. The rulers of the earliest states also engaged in symbolic activities that were equally vital to the maintenance of their power. They organized extravagant displays of wealth, often involving human sacrifices, and built palaces, temples, and monuments to the dead, often in the form of pyramids or ziggurats (temple towers consisting of a lofty pyramidal structure built in successive stages with outside staircases and a shrine at the top). These elaborate structures were designed to raise the prestige of local rulers and of the cities they ruled and the gods they worshiped.

IMPERIAL STATES

Through time the scale of state systems expanded as city-states traded with and sometimes absorbed other city-states. Eventually imperial systems emerged in which a single ruler controlled a large region of many cities and towns. Sargon of Akkad (reigned c. 2334–2279 BCE) may have established the first imperial state, in Mesopotamia, north of Sumer. By the middle of the second millennium BCE the Shang dynasty (approximately 1766–1045 BCE) had created an imperial state in northern China. Through time such states became more common. As states expanded, they taxed and administered larger areas, either directly or indirectly through local rulers. Improvements



buoyancy of the entire agrarian era. Our figures are too vague to allow much precision, but clearly, at least in the long trend, populations grew faster in areas of agriculture than elsewhere. However, they probably did not grow much faster than during the early agrarian era. Particularly in the cities, with their appalling sanitary conditions, bad air, and filthy water, death rates were extraordinarily high. Although cities offered more opportunities, they also killed people far more effectively than the villages. Population growth was also slowed by periodic demographic collapses. The spread of diseases into regions whose populations lacked immunities may have caused some of these collapses; overexploitation of the land, which could undermine the productive basis of entire civilizations, may have caused others. In southern Mesopotamia toward the end of the second millennium, populations fell sharply, probably as a result of overirrigation, which created soils too salty to be farmed productively. Archaeologists can trace the progress of salinization late during the second millennium through the increasing use of barley, a more salt-tolerant grain than wheat.

Agriculture, Cities, and Empires: 500 BCE–1000 CE

Most of the long trends that began after 3000 BCE continued during the period from 500 BCE to 1000 CE. Global populations rose (although they did so slowly during the middle of this period), the power, size, and number of states increased, and so did the extent of exchange networks. As agriculture spread, cities and states appeared in once-peripheral regions in northwestern Europe, sub-Saharan Africa, southern India, and southern China. Increasingly, agrarian civilizations encroached on regions inhabited by foragers, independent peasants, and pastoralists. Similar processes occurred in the Americas but with a time lag of approximately two thousand years.

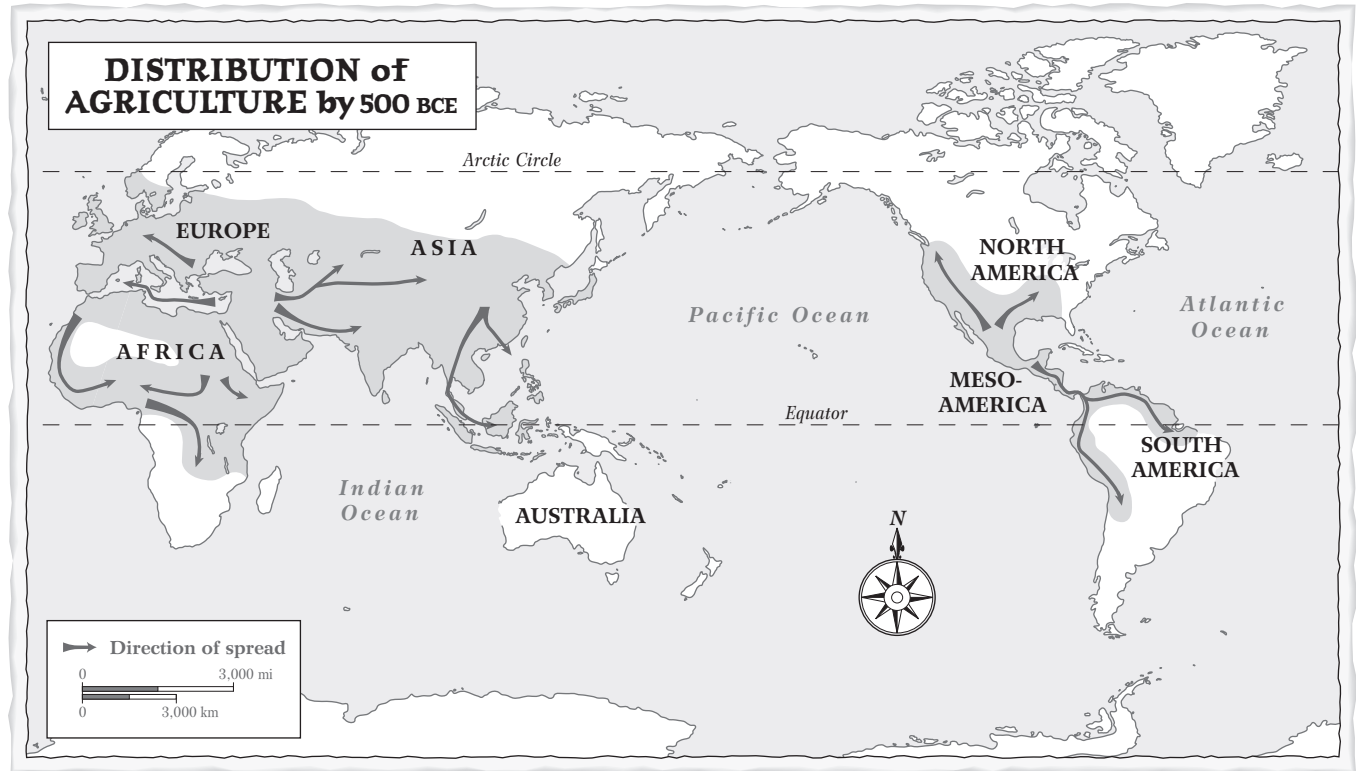
AFRO-EURASIA

The Achaemenid empire, created in Persia (modern Iran) during the sixth century BCE, marked a significant enhancement in state power because the empire controlled

For more on these topics, please see the following articles:

- Andean States p. 86 (v1)
 - Assyrian Empire p. 200 (v1)
 - Buddhism p. 267 (v1)
 - Byzantine Empire p. 278 (v1)
 - Catholicism, Roman p. 310 (v1)
 - China p. 332 (v1)
 - Confucianism p. 426 (v1)
 - Greece, Ancient p. 858 (v3)
 - Hinduism p. 902 (v3)
 - Islam p. 1024 (v3)
 - Judaism p. 1058 (v3)
 - Manichaeism p. 1179 (v3)
 - Mesoamerica p. 1230 (v3)
 - Mississippian Culture p. 1283 (v3)
 - Persian Empire p. 1462 (v4)
 - Roman Empire p. 1624 (v4)
 - State, The p. 1776 (v4)
 - Steppe Confederations p. 1782 (v4)
 - Trading Patterns, China Seas p. 1855 (v5)
 - Trading Patterns, Indian Ocean p. 1864 (v5)
 - Trading Patterns, Mediterranean p. 1870 (v5)
 - Trading Patterns, Pacific p. 1879 (v5)
 - Trading Patterns, Trans-Saharan p. 1883 (v5)
 - Turkic Empire p. 1905 (v5)
 - Zoroastrianism p. 2120 (v5)
-

a region five times as large as the greatest of its predecessors. During the next fifteen hundred years empires on this scale became the norm. They included the Han dynasty in China (206 BCE–220 CE), the Roman empire in the Mediterranean (27 BCE–476 CE), and the Mauryan empire (c. 324–c. 200 BCE) in India. The Muslim Abbasid empire, which ruled much of Persia and Mesopotamia from 749/750 to 1258, controlled a slightly larger area than its Achaemenid predecessors. Contacts also flourished between imperial states. During the sixth century BCE Cyrus I, the founder of the Achaemenid empire, invaded parts of modern central Asia. When the Chinese emperor, Han Wudi, invaded the same region three centuries later, the separate agrarian civilizations of the Mediterranean world and eastern Asia came into closer



contact than ever before, binding the whole of Eurasia into the largest system of exchange on Earth.

The increased reach of political, commercial, and intellectual exchange networks may explain another important development during this era: the emergence of religious traditions that also extended over huge areas—the first world religions. Whereas earlier religious traditions usually claimed the allegiance of particular communities or regions, world religions claimed to express universal truths and to represent universal gods—reflections, perhaps, of the increasing scale of imperial states.

The first world religion was probably Zoroastrianism, a religion whose founder may have come from central Asia during the sixth century BCE, at about the time when Cyrus I founded the Achaemenid empire. Buddhism was founded soon after in northern India during a period of rapid urbanization and state expansion. Its great period of expansion came early during the first millennium CE, when it began to spread in central Asia, China, and southeastern Asia. The influence of Christianity expanded within the Roman empire until, during the fourth century CE, it became the official religion of the state. Both Buddhism and Christianity spread into central Asia and eventually reached China, although of the two only Buddhism made a significant impact on Chinese civilization.

Even more successful was Islam, founded in southwestern Asia during the seventh century. Islam spread into north Africa, central Asia, India, and southeastern Asia, carried first by armies of conquest and later by the Muslim missionaries and holy men known as “sufis.”

The same forces that gave rise to the first world religions may also have spurred some of the first attempts at universal generalizations about reality in embryonic forms of philosophy and science. Although normally associated with the philosophical and scientific traditions of classical Greece, such ideas can also be found within the astronomical and mathematical traditions of Mesopotamia and the philosophical traditions of northern India and China.

THE AMERICAS

In the Americas, too, political systems expanded in size, in military power, and in cultural and commercial reach. During the first millennium CE complex systems of city-states and early empires emerged in Mesoamerica. At its height the great city of Teotihuacan in Mexico had a population of more than 100,000 people and controlled trade networks reaching across much of Mesoamerica. However, we cannot be certain that it had direct control of any other cities or states. Farther south,

A sixteenth-century Native American agricultural village as depicted by early English settlers in Virginia.

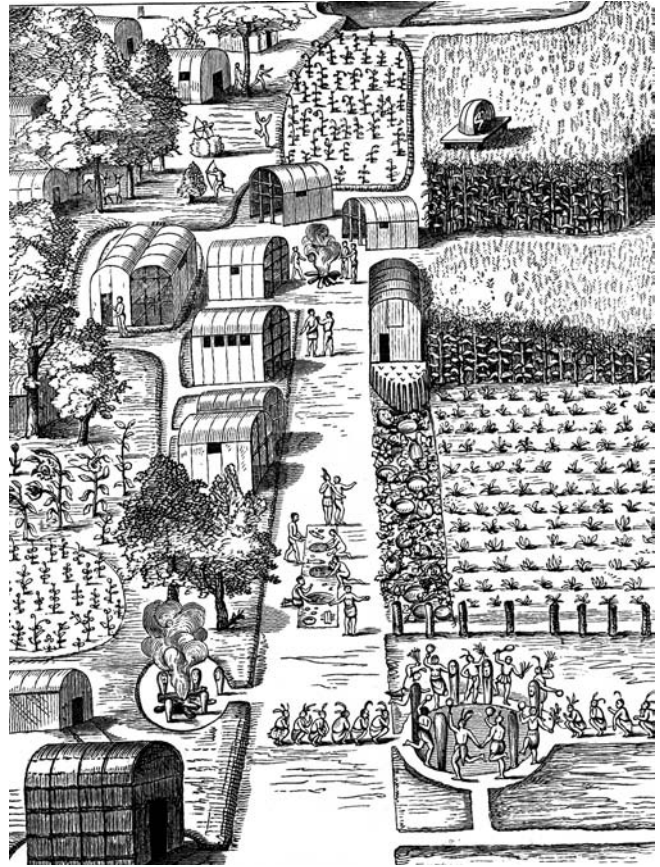
Mayan civilization consisted of a large number of regional states, some of which may have established at least temporary control over their neighbors. Both these powerful systems collapsed, however, during the second half of the first millennium CE. As in southern Mesopotamia early during the second millennium BCE, the collapse may have been caused by overexploitation of the land.

However, just as the political traditions of Sumer were eventually taken up in Babylon and Assyria, so, too, in Mesoamerica the political traditions of Teotihuacan and the Maya provided the cultural foundations for even more powerful states during the next period of the agrarian era. In the Andes, too, cities and states began to appear; the first may have been the Moche state of northern Peru, which flourished for almost eight hundred years during the first millennium CE. Like Teotihuacan, the Moche kingdom influenced a large area, although we cannot be certain how much direct political power it had over other cities and states. During the later half of the first millennium statelike powers also emerged farther south in the lands near Lake Titicaca in South America.

EXPANSION IN OTHER AREAS

Populations also grew beyond the zone of agrarian civilization, generating new forms of hierarchy. In the thinly populated steppe zones of Eurasia, pastoral nomads began to form large, mobile confederations that raided and taxed neighboring agricultural zones. In Mongolia in central Asia the Xiongnu people created spectacular empires during the second century BCE, as did the founders of the first Turkic empire during the sixth century CE. At its height the first Turkic empire reached from Mongolia to the Black Sea. In the Pacific zone migrants from the islands near Fiji began to settle the islands of Polynesia, scattered through the central and eastern Pacific. Hawaii and remote Easter Island may have been settled by 600 CE, but New Zealand seems to have been the last part of Polynesia to be settled, some time after 1000. Polynesia was settled by farming peoples, and in some regions, including Tonga and Hawaii, population growth created the preconditions for significant power hierarchies.

Finally, significant changes occurred even in regions



where agriculture had still made few inroads. In North America the slow northward spread of maize cultivation led to the establishment of numerous agricultural or semiagricultural communities, such as those known as the “Anasazi” (on the Colorado Plateau at the intersection of present-day Arizona, New Mexico, Colorado, and Utah). In the eastern parts of North America, too, farming communities emerged in regions such as the Ohio River valley, where they cultivated local plants such as sunflowers. Even in Australia foraging communities intensified production and settled in denser communities, particularly along the coasts.

Agricultural Societies on the Eve of the Modern Revolution: 1000–1750

During the last period of the agrarian era, from 1000 to 1750, earlier trends continued, but fundamental changes also prefigured the modern era.

Agriculture spread into previously marginal regions such as North America, southern Africa, and western China. Often migrant farmers settled new lands with the

The perfect knowledge of history is extremely necessary; because, as it informs us of what was done by other people, in former ages, it instructs us what to do in the like cases. Besides, as it is the common subject of conversation, it is a shame to be ignorant of it. • LORD CHESTERFIELD (1694–1773)

active support of metropolitan merchants or governments. World populations continued to grow, despite sharp declines in much of Eurasia after the Black Death (bubonic plague) of the fourteenth century and in the Americas during the sixteenth century after the arrival of Afro-Eurasian diseases such as smallpox. The sixteenth-century economic and demographic collapse in the Americas was offset in the long run by the arrival of immigrants, livestock, and new crops from Eurasia and the subsequent expansion of land under cultivation. In agriculture, weaponry, transportation (particularly seaborne transportation), and industry, a steady trickle of innovations sustained growth by gently raising average productivity and enhancing state power. The economist Angus Maddison has estimated that global gross domestic product (GDP, the total production of goods and services)

rose from approximately \$120 billion (in 1990 international dollars) in 1000 to almost \$700 billion in 1820.

CREATION OF GLOBAL NETWORKS

The most important change during this era was the unification of the major world zones during the sixteenth century. This unification created the first global networks of exchanges. The linking of regions that previously had no contact for many thousands of years generated a commercial and intellectual synergy that was to play a critical role in the emergence of the modern world.

In Afro-Eurasia the most striking feature of the early part of the last millennium was the increasing scale and intensity of international contacts. Viking raiders and traders traveled in central Asia, in the Mediterranean, along the coast of western Europe, even in distant Iceland and Greenland, and in 1000 they even created a short-lived colony in Newfoundland, Canada. The astonishing conquests of the Mongols early during the thirteenth century created a huge zone of relative peace extending from Manchuria to the Mediterranean, and, with Mongol protection, the trade routes of the Silk Roads flourished during the late thirteenth and early fourteenth centuries. Sea routes were equally active, and exchanges of goods by sea from the Mediterranean through southern and south-eastern Asia to China became routine. Briefly during the early fifteenth century Chinese fleets made a series of expeditions to the West, some of which took them to Arabia in southwestern Asia and east Africa.

Control of the Eurasian heartlands of Persia and central Asia—first by the Muslim empire of the Abbasids late during the first millennium and then by the Mongols—encouraged the exchange of technologies, goods, and religious and cultural traditions throughout Eurasia. In the Americas the first imperial states appeared. The most successful and best known were those of the Aztecs, based at Tenochtitlan in Mexico, and of the Incas, based at Cuzco in Peru. These were the first American polities (political organizations) to exert direct political and military control over very large areas.

However, the small, highly commercialized states of western Europe, not imperial states, eventually linked the

For more on these topics, please see the following articles:

Aztec Empire p. 221 (v1)
 Biological Exchanges p. 249 (v1)
 China p. 332 (v1)
 Columbian Exchange p. 386 (v1)
 Crusades, The p. 453 (v1)
 Diseases—Overview p. 543 (v2)
 Diseases, Animal p. 551 (v2)
 Economic Growth, Extensive and Intensive p. 610 (v2)
 Expansion, European p. 700 (v2)
 Exploration, Chinese p. 712 (v2)
 Firearms p. 750 (v2)
 Inca Empire p. 958 (v3)
 Islamic World p. 1036 (v3)
 Labor Systems, Coercive p. 1094 (v3)
 Maritime History p. 1188 (v3)
 Mongol Empire p. 1295 (v3)
 Navigation p. 1363 (v4)
 Ottoman Empire p. 1401 (v4)
 Population p. 1484 (v4)
 Slave Trades p. 1717 (v4)
 Technology—Overview p. 1806 (v5)
 Trading Patterns, Mesoamerican p. 1874 (v5)
 Viking Society p. 1936 (v5)
 War and Peace—Overview p. 1943 (v5)



A display of burial goods recovered from the burial mounds of agrarian era farmers in southeastern Missouri.



separate world zones of the agrarian era. The first significant states had emerged in western Europe during the first millennium CE as the region had been absorbed within the commercial and cultural hinterland of the Roman empire. Early during the ninth century the first holy Roman emperor, Charlemagne, tried to create a revived Roman empire from a base on the border between modern France and Germany. His failure helps explain why Europe emerged as a region of competing medium-sized states. Because such states had a more limited tax base than great imperial powers such as the Abbasid empire or China's Tang (618–907 CE) empire, they had to seek alternative sources of revenue, including revenues from trade, to survive the vicious warfare that became the norm in this region.

Not surprisingly, a tradition of predatory, militaristic trading states emerged, epitomized by the Vikings. Blocked in the eastern Mediterranean, European powers sought new ways of cutting into the great markets of southern and eastern Asia, and this search, backed aggressively by European governments, eventually encouraged European merchants, led by the Portuguese, to circle the globe. This search also encouraged the technological innovations needed to create ships capable of navigating the world. The wealth that European states secured as they cut in on the profits of the great trading systems of southeastern Asia and the even more spectacular gains they made by conquering the great civilizations of Central and South America repaid the initial investment of money and resources many times over.

IMPACT OF GLOBAL NETWORKS

The Americas and Europe were the first regions to be transformed by the new global system of exchanges. In eastern Eurasia the incursions of Europeans had a limited impact for a century or more. Portuguese and Spanish ships, followed a century later by Dutch and English ships, seized important trading ports and began to cut in on local trade, particularly in spices. However, they had little impact on the major polities of the region. In the Americas European weaponry, the breakdown of traditional political and economic structures, and, perhaps

most important of all, the impact of Eurasian pathogens such as smallpox crippled the Aztec and Inca empires and secured for the Spanish government an astonishing windfall of trade goods and precious metals that funded the first empire to straddle the Atlantic Ocean. European diseases were particularly destructive in the Americas because most natives lacked immunity to the diseases that had spread through Afro-Eurasia through many centuries. Estimates of the population decline during the sixteenth century in the most densely populated regions of the Americas range from 50 percent to almost 90 percent.

Control of global trade networks brought European states great commercial wealth, but it also brought an influx of new information about geography, the natural world, and the customs of other societies. The torrent of new information available to European intellectuals may have played a critical role in undermining traditional certainties and creating the skeptical, experimental cast of mind that we associate with the so-called scientific revolution.

However, no region on Earth was entirely unaffected by the creation of the first global system of exchanges. The exchange of goods between the Americas and Afro-Eurasia stimulated population growth throughout Afro-Eurasia as crops such as maize, cassava, and potatoes spread to China, Europe, and Africa, where they supplemented existing crops or allowed people to cultivate lands unsuitable for other crops. The abundant silver of the Americas gave a huge boost to international trade, particularly after Chinese governments began to demand the payment of taxes in silver from the 1570s, pulling more and more silver toward what was still the largest single economy in the world. New drugs such as tobacco and coca became available for the first time to Afro-Eurasian consumers, whereas older drugs, such as coffee, circulated more widely, stimulating consumer demand in cities from Istanbul to Mexico City.

Perhaps most important of all, the position of Europe within global networks of exchange was transformed. As long as the world was divided into separate zones, Europe could be little more than a marginal borderland of Afro-Eurasia. The hub of Eurasian networks of exchange lay in the Islamic heartland of Persia and Meso-

History, n. An account, mostly false, of events, mostly unimportant, which are brought about by rulers, mostly knaves, and soldiers, mostly fools. • AMBROSE BIERCE (1842–1914)

potamia. In the integrated world system that emerged during the sixteenth century, European states found themselves at the hub of the largest and most vigorous exchange networks that had ever existed. The huge flows of wealth and information that coursed through these networks would transform the role and significance of Europe and the Atlantic region in world history, and eventually they would transform the entire world.

Agrarian Era in World History

The introduction of agricultural technologies raised productivity, increased populations, and stimulated innovation. These developments explain why change was so much more rapid during the agrarian era than during the era of foragers. Larger, denser communities created new problems that were solved by forming the large, hierarchical structures that we call “states,” “empires,” and “civilizations.” Within these structures the very nature of human communities was transformed as families and households found themselves incorporated in, and disciplined by states, religions, and market forces. The exchange of technologies and goods between larger regions and larger populations stimulated many small improvements in agrarian techniques, communications technologies, and the technologies of information storage and warfare. However, although innovation was much faster than it had been during the era of foragers, it was rarely fast enough to keep pace with population growth, which is why, on the smaller scales that meant most to rulers and their subjects, the characteristic rhythm of change during the agrarian era was cyclical.

The modern world built on the slow accumulation of people, resources, and information that took place during the agrarian era, but it was marked out from this era by another sharp acceleration in rates of innovation that would lead to one more fundamental transformation in human lifeways.

Further Reading

- Barber, E. W. (1994). *Women's work: The first 20,000 years: Women, cloth and society in early times*. New York: W. W. Norton.
- Bentley, J. H., & Ziegler, H. F. (1999). *Traditions and encounters: A global perspective on the past*. Boston: McGraw-Hill.
- Bulliet, R., Crossley, P. K., Headrick, D. R., Hirsch, S. W., Johnson, L. L., & Northrup, D. (2001). *The Earth and its peoples: A global history* (2nd ed.). Boston: Houghton Mifflin.
- Burenhult, G. (Ed.). (1993–1995). *The illustrated history of mankind* (Vols. 3–4). St. Lucia, Australia: University of Queensland Press.
- Christian, D. (2004). *Maps of time: An introduction to big history*. Berkeley and Los Angeles: University of California Press.
- Cohen, M. (1977). *The food crisis in prehistory*. New Haven, CT: Yale University Press.
- Cohen, M. (1989). *Health and the rise of civilization*. New Haven, CT: Yale University Press.
- Diamond, J. (1998). *Guns, germs, and steel: The fates of human societies*. London: Vintage.
- Ehret, C. (2002). *The civilizations of Africa: A history to 1800*. Charlottesville: University Press of Virginia.
- Fagan, B. M. (2001). *People of the Earth: An introduction to world prehistory* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Heiser, C. B. (1990). *Seed to civilization: The story of food*. Cambridge, MA: Harvard University Press.
- Ladurie, E. L. (1974). *The peasants of Languedoc* (J. Day, Trans.). Urbana: University of Illinois Press.
- Livi-Bacci, M. (1992). *A concise history of world population*. Oxford, UK: Blackwell.
- Maddison, A. (2001). *The world economy: A millennial perspective*. Paris: OECD.
- McNeill, J. R., & McNeill, W. H. (2003). *The human web: A bird's-eye view of world history*. New York: W. W. Norton.
- McNeill, W. H. (1977). *Plagues and people*. Oxford, UK: Blackwell.
- McNeill, W. H. (1982). *The pursuit of power: Technology, armed force and society since A.D. 1000*. Oxford, UK: Blackwell.
- Mears, J. (2001). Agricultural origins in global perspective. In M. Adas (Ed.), *Agricultural and pastoral societies in ancient and classical history* (pp. 36–70). Philadelphia: Temple University Press.
- Piperno, D. R., & Pearsall, D. M. (1998). *The origins of agriculture in the lowland neotropics*. London: Academic Press.
- Richerson, P. T., & Boyd, R. (2004). *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.
- Sherratt, A. (1981). Plough and pastoralism: Aspects of the secondary products revolution. In I. Hodder, G. Isaac, & N. Hammond (Eds.), *Patterns of the past* (pp. 261–305). Cambridge, UK: Cambridge University Press.
- Sherratt, A. (1997). The secondary exploitation of animals in the Old World. *World Archaeology*, 15(1), 90–104.
- Smith, B. D. (1995). *The emergence of agriculture*. New York: Scientific American Library.
- Taagepera, R. (1978). Size and duration of empires: Growth-decline curves, 3000 to 600 BC. *Social Science Research*, 7, 180–196.
- Taagepera, R. (1978). Size and duration of empires: Systematics of size. *Social Science Research*, 7, 108–127.
- Taagepera, R. (1979). Size and duration of empires: Growth-decline curves, 600 BC to 600 AD. *Social Science Research*, 3, 115–138.
- Taagepera, R. (1997). Expansion and contraction patterns of large polities: Context for Russia. *International Studies Quarterly*, 41(3), 475–504.
- Wolf, E. R. (1982). *Europe and the people without history*. Berkeley and Los Angeles: University of California Press.

Our World: The Modern Era



The modern era is the briefest and most turbulent of the three main eras of human history. Whereas the era of foragers lasted more than 200,000 years and the agrarian era about 10,000 years, the modern era has lasted just 250 years. Yet, during this brief era change has been more rapid and more fundamental than ever before; indeed, populations have grown so fast that 20 percent of all humans may have lived during these two and a half centuries. The modern era is also the most interconnected of the three eras. Whereas new ideas and technologies once took thousands of years to circle the globe, today people from different continents can converse as easily as if they lived in a single global village. History has become world history in the most literal sense.

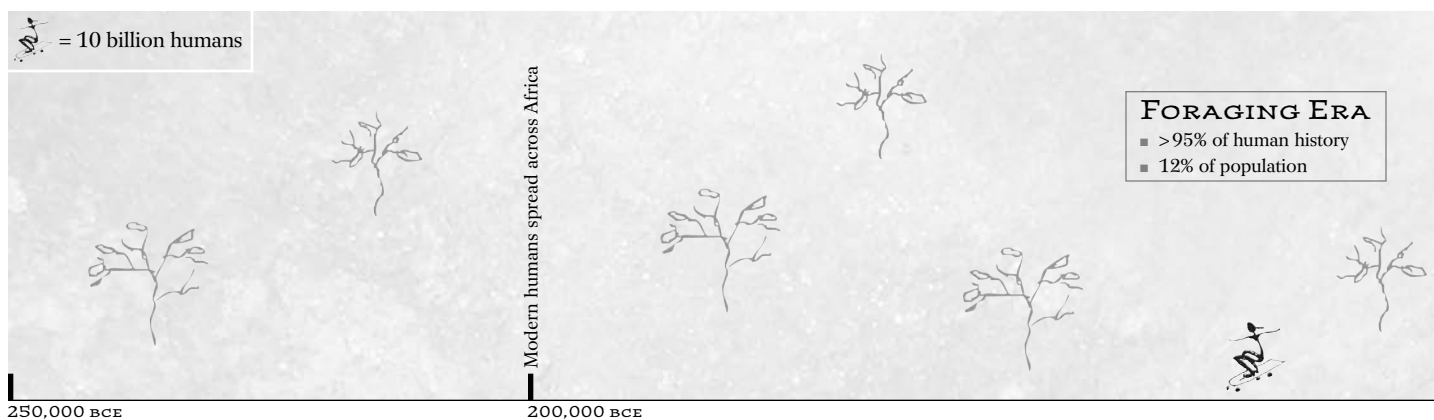
For our purposes the modern era is assumed to begin about 1750. Yet, its roots lay deep in the agrarian era, and we could make a good case for a starting date of 1500

or even earlier. Determining the end date of the modern era is even trickier. Some scholars have argued that it ended during the twentieth century and that we now live in a postmodern era. Yet, many features of the modern era persist today and will persist for some time into the future; thus, it makes more sense to see our contemporary period as part of the modern era. This fact means that we do not know when the modern era will end, nor can we see its overall shape as clearly as we might wish.

The fact that we cannot see the modern era as a whole makes it difficult to specify its main features, and justifies using the deliberately vague label “modern.” At present the diagnostic feature of the modern era seems to be a sharp increase in rates of innovation. New technologies enhanced human control over natural resources and stimulated rapid population growth. In their turn, technological and demographic changes transformed

250,000 Years of Human History

(NOT DRAWN TO SCALE)



lifeways, cultural and religious traditions, patterns of health and aging, and social and political relationships.

For world historians the modern era poses distinctive challenges. We are too close to see it clearly and objectively; we have so much information that we have difficulty distinguishing trends from details; and change has occurred faster than ever before and embraced all parts of the world. What follows is one attempt to construct a coherent overview, based on generalizations that have achieved broad acceptance among world historians.

Major Features and Trends of the Modern Era

The modern era is the first to have generated a large body of statistical evidence; thus, it is also the first in which we can quantify many of the larger changes.

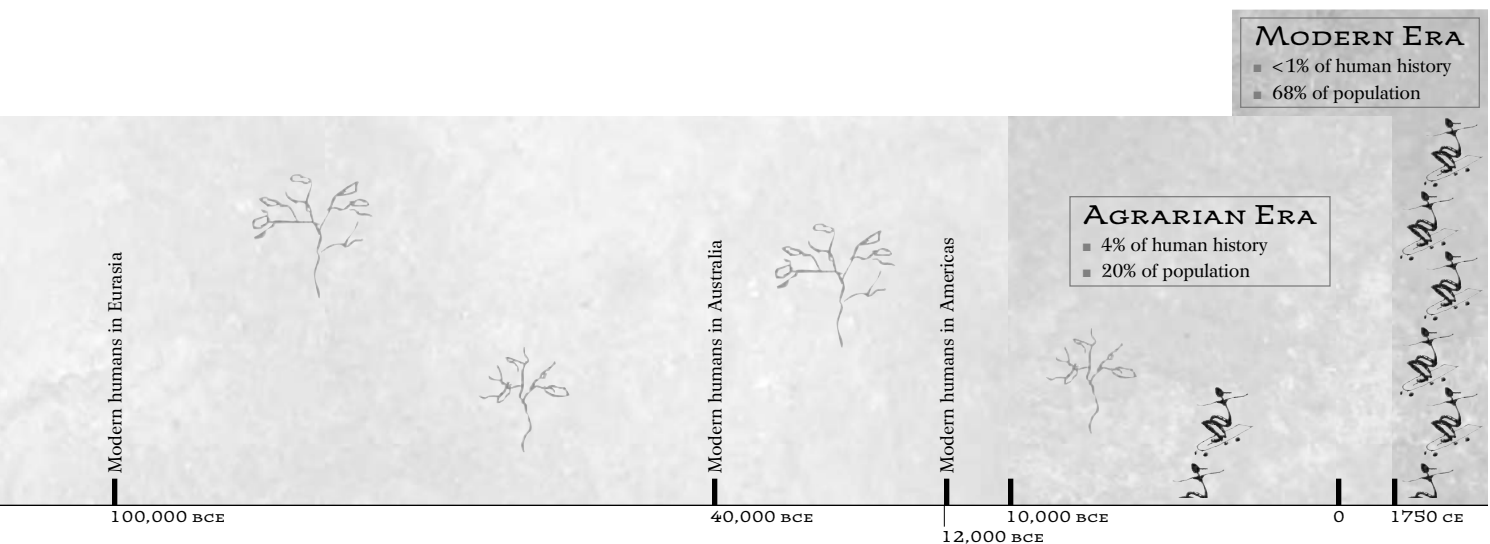
INCREASES IN POPULATION AND PRODUCTIVITY

Human populations have increased faster than ever before during the modern era, although growth rates slowed during the late twentieth century. Between 1750 and 2000 the number of men and women in the world rose from approximately 770 million to almost 6 billion, close to an eightfold increase in just 250 years. This increase is the equivalent of a growth rate

Key Features and Trends of the Modern Era

- Rapid Population Growth
- Technological Innovation
- Large Increase in Productivity
- Harnessing of Fossil and other Forms of Energy
- Large Communities
- Bureaucracy
- Nationalism
- Longer Life Expectancy
- Broader Role for Women
- Commercialization
- Global Networks
- Destruction of Foraging and Agrarian Lifeways

of about 0.8 percent per annum and represents a doubling time of about eighty-five years. (Compare this with estimated doubling times of fourteen hundred years during the agrarian era and eight thousand to nine thousand years during the era of foragers.) An eightfold increase in human numbers was possible only because productivity rose even faster. The estimates of the economist Angus Maddison suggest that global gross domestic product rose more than ninety-fold during three hundred years, whereas production per person rose ninefold.



All history is necessarily written from the standpoint of the present, and is, in an inescapable sense, the history not only of the present but of that which is contemporaneously judged to be important in the present. • JOHN DEWEY (1859–1952)

For more on these topics, please see the following articles:

Colonialism p. 381 (v2)
 Democracy, Constitutional p. 508 (v2)
 Diasporas p. 521 (v2)
 Empire p. 640 (v2)
 Global Imperialism and Gender p. 838 (v2)
 Global Migration in Modern Times p. 844 (v3)
 Indigenous Peoples Movements p. 970 (v3)
 Industrial Technologies p. 981 (v3)
 Information Societies p. 985 (v3)
 Modernity p. 1287 (v3)
 Population p. 1484 (v4)
 Technology—Overview p. 1806 (v5)
 Urbanization p. 1925 (v5)
 Western Civilization p. 2041 (v5)
 Women's and Gender History p. 2046 (v5)
 World Cities in History—Overview p. 2066 (v5)
 World System Theory p. 2075 (v5)

These astonishing increases in productivity lie behind all the most significant changes of the modern era. Productivity rose in part because new technologies were introduced. In agriculture, for example, food production kept pace with population growth because of improved crop rotations, increased use of irrigation, widespread application of artificial fertilizers and pesticides, and the use of genetically modified crops. However, productivity also rose because humans learned to exploit new sources of energy. During the agrarian era each human controlled, on average, 12,000 kilocalories a day (about four times the energy needed to sustain a human body), and the most powerful prime movers available were domestic animals or wind-driven ships. During the modern era humans have learned to harvest the huge reserves of energy stored in fossil fuels such as coal, oil, and natural gas and even to exploit the power lurking within atomic nuclei. Today each person controls, on average, 230,000 kilocalories a day—twenty times as much as during the agrarian era. A world of planes, rockets, and nuclear power has replaced a world of horses, oxen, and wood fires.

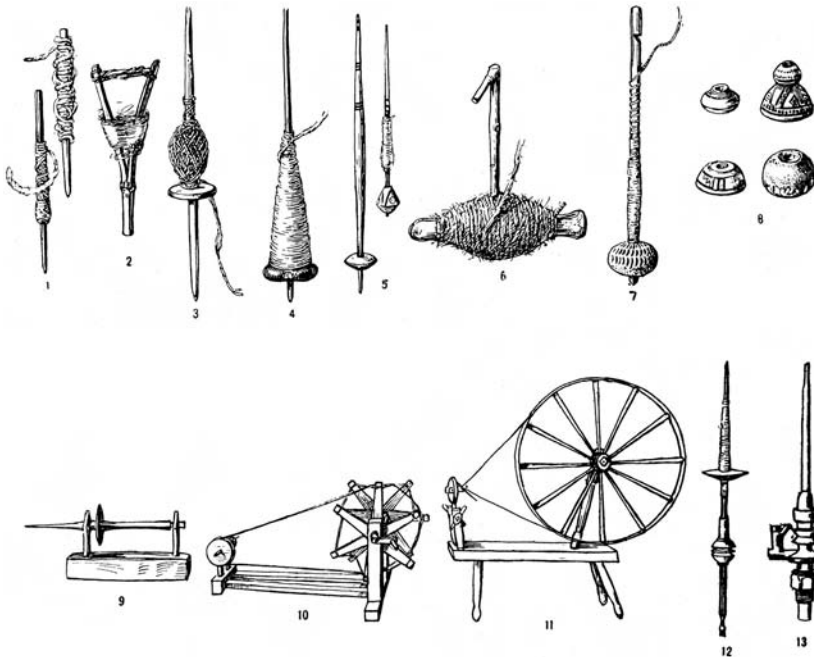
CITY SPRAWL

As populations have increased, so has the average size of human communities. In 1500 about fifty cities had more than 100,000 inhabitants, and none had more than a million. By 2000 several thousand cities had more than 100,000 inhabitants, about 411 had more than a million, and 41 had more than 5 million. During the agrarian era most people lived and worked in villages; by the end of the twentieth century almost 50 percent of the world's population lived in communities of at least five thousand people. The rapid decline of villages marked a fundamental transformation in the lives of most people on Earth. As during the agrarian era, the increasing size of communities transformed lifeways, beginning with patterns of employment: Whereas most people during the agrarian world were small farmers, today most people support themselves by wage work in a huge variety of occupations.

Innovations in transportation and communications have transformed relations between communities and regions. Before the nineteenth century no one traveled faster than the pace of a horse (or a fast sailing ship), and the fastest way to transmit written messages was by state-sponsored courier systems that used relays of horses. Today messages can cross the world instantaneously, and even perishable goods can be transported from one end of the world to another in just a few hours or days.

INCREASINGLY COMPLEX AND POWERFUL GOVERNMENTS

As populations have grown and people's lives have become more intertwined, more complex forms of regulation have become necessary, which is why the business of government has been revolutionized. Most premodern governments were content to manage war and taxes, leaving their subjects to get on with their livelihoods more or less unhindered, but the managerial tasks facing modern states are much more complex, and they have to spend more effort in mobilizing and regulating the lives of those they rule. The huge bureaucracies of modern states are one of the most important by-products of the modern



This plate shows a variety of tools of increasing technological complexity used by humans at different times and places to twist fiber. Spindles 1 and 2 are the simplest forms (other than human fingers) with fiber wound around a wooden peg. Spindles 3 through 7 are more complex, with a whorl added to the spindle. Spindle 9 marks the transition to modern spindles shown in 10 and 11 with flywheels.

revolution. So, too, are the structures of democracy, which allow governments to align their policies more closely with the needs and capabilities of the large and varied populations they rule. Nationalism—the close emotional and intellectual identification of citizens with their governments—is another by-product of these new relationships between governments and those they rule.

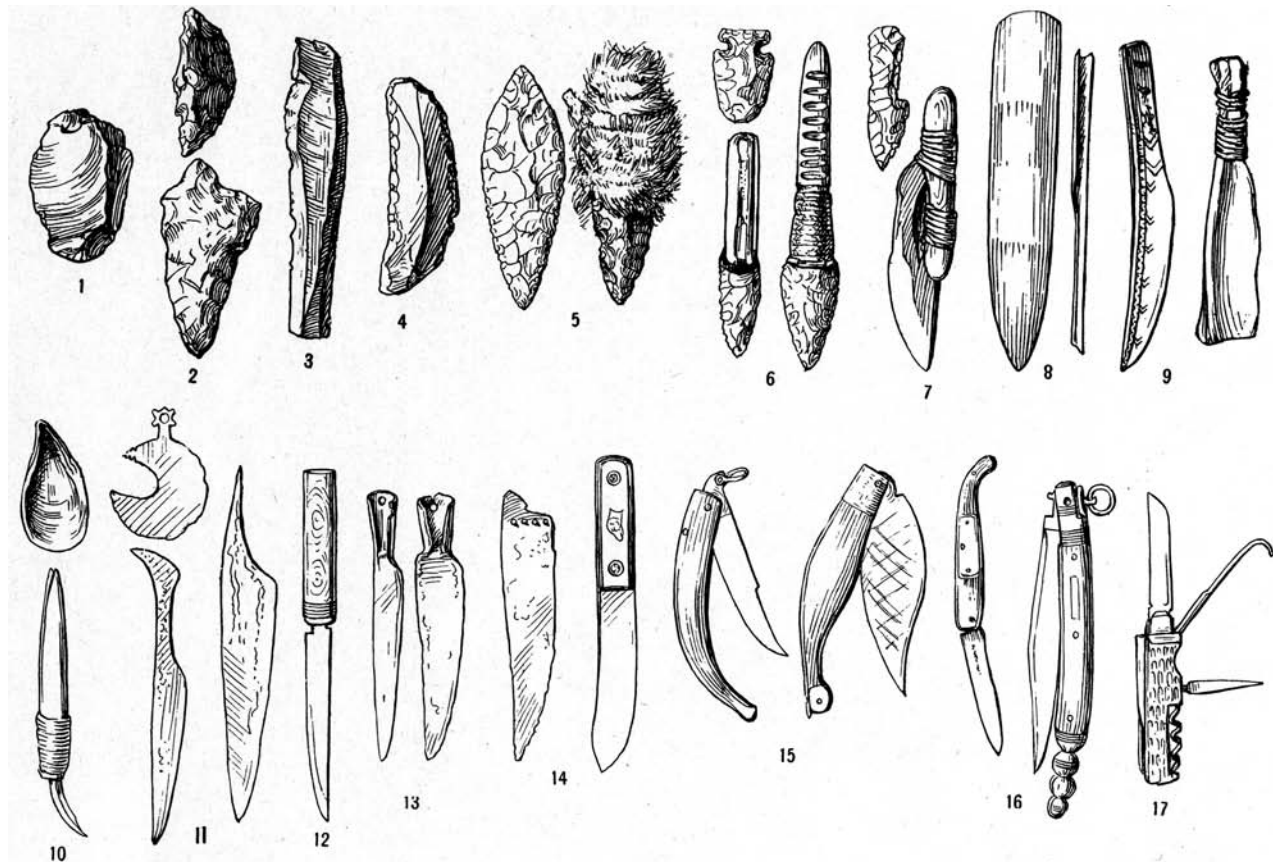
The presence of democracy and nationalism may suggest that modern governments are more reluctant to impose their will by force, but, in fact, they have much more administrative and coercive power than did rulers of the agrarian era. No government of the agrarian era tried to track the births, deaths, and incomes of all the people it ruled or to impose compulsory schooling; yet, many modern governments handle these colossal tasks routinely. Modern states can also inflict violence more effectively and on a larger scale than even the greatest empires of the agrarian era. Whereas an eighteenth-century cannon could destroy a house or kill a closely packed group of soldiers, modern nuclear weapons can destroy entire cities and millions of people, and the concerted launch of many nuclear weapons could end human history within just a few hours.

A subtler change in the nature of power is the increased dependence of modern states on commercial success rather than raw coercion. Their power depends so much on the economic productivity of the societies they

rule that modern governments have to be effective economic managers. The creation of more democratic systems of government, the declining importance of slavery, the ending of European imperial power during the twentieth century, the collapse of the Soviet command economy in 1991, and the ending of apartheid (racial segregation) in South Africa in 1990 and 1991 all reflected a growing awareness that successful economic management is more effective than crudely coercive forms of rule.

GROWING GAP BETWEEN RICH AND POOR

Although wealth has accumulated faster than ever before, the gap between rich and poor has widened, both within and between countries. The estimates of Angus Maddison suggest that in 1820 the GDP per person of the United States was about three times that of all African states; by 1998 the ratio had increased to almost twenty times that of all African states. Yet, some of the benefits of modern technologies have been shared more generally. Improvements in the production and supply of food and in sanitation, as well as improved understanding of diseases and the introduction of vaccinations (during the nineteenth century) and antibiotics (during the twentieth century) help explain why, for the first time in human history, so few people die in infancy or childhood that average life expectancies have more than doubled, rising from about



This interesting plate of knives shows the development of the hand knife used throughout human history for working wood. Knives 1 through 7 are all of stone, each one more carefully finished than earlier ones. Knives 8 through 10 show specialized use of bamboo, ivory, and clam shell. The remainder of the knives all have metal blades and show increasing sophistication with handles, hinges, springs, and several blades in one knife.

twenty-six years in 1820 to about sixty-six years at the end of the twentieth century. These gains have not been shared equally, but all parts of the world have felt their impact.

IMPROVED OPPORTUNITIES FOR WOMEN

Relations between men and women have been renegotiated in many parts of the world. New energy sources have reduced the importance of physical strength in employment, new forms of contraception have given women and men more control over reproduction, and new technologies, such as bottle feeding, have allowed parents to more easily share the task of caring for infants. Reduced infant mortality and new forms of socialized old-age support have reduced the pressure to have many children as

a form of old-age insurance. Finally, urbanization and commercialization have created more varied forms of employment for women as well as men. Women are less closely tied to their traditional role as child rearers, particularly in the most industrialized regions of the world. Nevertheless, gender inequality still survives even in those societies most deeply transformed by the modern revolution. Even in the United States and western Europe the average wages of women lag behind those of men.

DESTRUCTION OF PREMODERN LIFEWAYS

Finally, the modern revolution has destroyed premodern lifeways. Until the twentieth century independent communities of foragers survived in many parts of the world, but by the end of the twentieth century no foragers lived

UN Commemoration of the Abolition of Slave Trade

While acknowledging that slavery has existed since antiquity and continues to exist in modern form, the United Nations declared 2004 as International Year to Commemorate the Struggle against Slavery and its Abolition. Below are excerpts from a message delivered by Koichiro Matsuura, director-general of UNESCO (the United Nations Educational, Scientific and Cultural Organization), on 23 August 2004.

The celebration of 23 August, International Day for the Remembrance of the Slave Trade and its Abolition, has particular symbolic value this year, 2004, which was proclaimed International Year to Commemorate the Struggle against Slavery and its Abolition by the United Nations General Assembly. The purpose of the Year is to remind humanity of the fight of the slaves for freedom, justice and dignity, a fight that led to the independence of Haiti and the proclamation in 1804 of the first Black republic.

The date of 23 August refers to the insurrection that started in the night of 22 to 23 August 1791 on the island of Saint-Domingue (today divided between Haiti and the Dominican Republic), led by Toussaint Louverture, the first Black major general. The insurrection was to lead to the first decisive victory for slaves against their oppressors in the history of humanity.

On 23 August 2004, we are thus commemorating two key events: the revolt of 1791 and its culmination in 1804.

The Day gives us the opportunity to reflect together

on the historical causes, processes and consequences of the unprecedented tragedy that was slavery and the slave trade, a tragedy that was concealed for many years and is yet to be fully recognized.

It also provides us with an opportunity to understand more clearly the interactions that the slave trade generated throughout the world between the different peoples involved. It not only disrupted the lives of millions of human beings uprooted from their land and deported in the most inhuman conditions, but it brought about cultural exchanges which deeply and lastingly influenced morals and beliefs, social relations and knowledge on several continents.

[...]

Beyond these retrospective dimensions, the Day aims to sensitize and alert public opinion to the new trade in human beings, for slavery, although abolished and penalized in international instruments, is still practised in new forms, that today affect millions of men, women and children across the world.

I therefore call on the whole population in all Member States, in particular intellectuals, political, religious and community leaders, educators, artists and young people, to mark the Day with acts of meditation, awareness-raising and exchange about the tragedy of slavery that we cannot forget, and that we can never again tolerate.

Source: Message of the director-general of UNESCO. (August 23, 2004). Retrieved September 8, 2004, from http://portal.unesco.org/culture/en/ev.php-URL_ID=22385&URL_DO=DO_TOPIC&URL_SECTION=201.html

outside a modern state, and their lifeways had been transformed as they had been forcibly brought into the modern world. Peasant farming—the lifeway of most women and men throughout the agrarian era—declined as peasant households were unable to compete with large, industrial agribusinesses or the commercial farmers of more industrialized countries. By the end of the twentieth century peasant farming had vanished in much of the world. Even where it survived—in much of east Asia and Africa, for example, as well as in much of Latin America—it was in decline. These changes marked the

end of traditions, cultures, and lifeways that had shaped the lives of most humans throughout the earlier eras of human history.

Explaining the Modern Revolution

The key to these momentous changes was a sudden rise in the productivity of human labor caused by increasing rates of innovation. So, to explain modernity we must explain why rates of innovation have risen so fast during the modern era. As yet no general agreement exists on the



A modern Chinese market in Beijing combines the traditional market with many modern features.

causes of the modern revolution or, indeed, on the general causes of innovation in human history. However, widespread agreement exists on some of the more important contributing factors.

**ACCUMULATED CHANGES
OF THE AGRARIAN ERA**

First, the modern revolution clearly built on the accumulated changes of the agrarian era. Slow growth during several millennia had led to incremental technological improvements in agriculture and water management, in warfare, in mining, in metalwork, and in transportation and communications. Improvements in transportation and communications—such as the development of more maneuverable ships or the ability to print with movable type—were particularly important because they increased the scale of exchanges and ensured that new technologies, goods, and ideas circulated more freely. Methods of organizing large numbers of humans for warfare or tax collection also improved during the agrarian era. In ways that are not yet entirely clear, these slow technological and organizational changes, together with a steady expansion in the size and scale of global markets, created the springboard for the much faster changes of the modern era. During the final centuries of the agrarian era the pace of change was already increasing. International GDP grew almost sixfold between 1000 and 1820, whereas hardly any growth had occurred at all during the previous millennium.

RISE OF COMMERCIAL SOCIETIES

Second, most historians would agree that the modern revolution is connected with the rise of more commercial

societies. From the Scottish economist Adam Smith onward economists have argued that a close link exists between innovation and commercial activity. Smith argued that large markets allow increased specialization, which encourages more precise and productive labor. Equally important, entrepreneurs buying and selling in competitive markets faced competition of a kind that landlords and governments of the agrarian era could usually avoid. To survive, entrepreneurs had to undercut their rivals by selling and producing goods at lower prices. To do that meant trading and producing with maximum efficiency, which usually meant finding and introducing the most up-to-date technology. As commercial exchanges spread, so did the number of wage workers: people who took their own labor to market. Because they competed with others to find work, wage workers also had to worry about the cheapness and productivity of their labor.

For these reasons the slow commercialization of economies that occurred throughout the agrarian era probably raised productivity by stimulating innovation. As the wealth, influence, and number of entrepreneurs and wage earners increased, the societies in which they lived became more open and receptive to innovation.

**DEVELOPMENT OF A SINGLE
GLOBAL NETWORK**

Third, the linking of world zones into a single global network from the sixteenth century provided a sharp stimulus to commercial growth and technological innovation. In just a century or so the scale on which goods and ideas could be exchanged almost doubled, and a huge variety of new goods and ideas entered into global circulation. Maize, sugar, silver, coffee, cotton, tobacco, potatoes, and the productive and commercial expertise that went with these commodities were no longer confined to particular regions but instead were available throughout the world. Even the trade in people was internationalized. Before the sixteenth century the most active slave traders operated in the Islamic world, and most of their slaves came from Slavic or Turkic peoples to their north. From the sixteenth century European slavers began to capture or buy African

Like most of those who study history, he learned from the mistakes of the past how to make new ones. • A. J. P. TAYLOR (1906–1990)

slaves and to ship them to plantations in the Americas. For better or worse, such global exchanges stimulated commerce throughout the world.

WESTERN EUROPE'S EMERGENCE AS A GLOBAL HUB

Although change was rapid, it did not transform all parts of the world at once, and the order in which different regions were transformed had a profound effect on the course of modern history. This fact is the fourth factor contributing to the modern revolution. The societies of western Europe had been at the margins of the great trading systems of the agrarian era, but they were at the center of the global networks of exchange created during the sixteenth century because they controlled the ocean-going fleets that knit the world into a single system. Western Europe was better placed than any other region to profit from the vast flows of goods and ideas within the emerging global system of exchange. The European scientific revolution was, in part, a response to the torrent of new ideas pouring into Europe as a result of its expanded contacts with the rest of the world. Awareness of new ideas, crops, religions, and commodities undermined traditional behaviors, cosmologies, and beliefs and posed sharply the question of how to distinguish between false and true knowledge of the world. The reinvention and spread of printing with movable type ensured that new information would circulate more easily in Europe than elsewhere.

At the same time European states, in an environment of almost continuous warfare, desperately needed new sources of revenue; thus, they were keen to exploit the commercial opportunities created within the global economic system. They did so partly by seizing the resources of the Americas and using American commodities such as silver to buy their way into the markets of southern and eastern Asia, the largest in the world. The increasing scale of commercial and intellectual exchanges within Europe created an environment that was particularly open to innovation because European innovators could draw on the intellectual and commercial resources of the entire world. The primacy of western Europe during the early

stages of the modern revolution allowed it and the North American region to put their distinctive stamp on the modern revolution and to achieve a global hegemony that has so far lasted almost two centuries. Because of Europe's primacy English is the universal language of modern diplomacy and business rather than Persian or Chinese, and suits and ties rather than kaftans are worn in the United Nations.

OTHER FACTORS

Fifth, more particular factors must enter into any detailed explanation of the modern revolution. The peculiarly commercialized nature of European states undoubtedly helps explain their receptiveness to innovation, but geographical factors, such as climatic changes, or the presence of large, relatively accessible seams of coal in Britain and northwestern Europe, may also have shaped the timing and geography of the modern revolution.

Industrial Revolution: 1750–1914

These arguments suggest that the ingredients of the modern revolution were present in all parts of the world, even though its full impact first became apparent in northwestern Europe and the eastern seaboard of what became the United States. In this region technological change accelerated from the late eighteenth century. Familiar markers of change include the introduction and spread of more productive agricultural techniques, more efficient machines for spinning and processing cotton, the improved steam engine of the Scottish inventor James Watt, and the first locomotive. By the early nineteenth century contemporaries saw that something exceptional was happening. In 1837 the French revolutionary Auguste Blanqui (1805–1881) declared that an “industrial revolution” was under way in Britain and that it was as significant as

For more on these topics, please see the following articles:

Dictionaries and Encyclopedias p. 528 (v2)

Energy p. 646 (v2)

Enlightenment, The p. 660 (v2)

Industrial Technologies p. 981 (v3)



This line drawing by artist George Catlin is a depiction of himself painting a portrait during his travels in the American Indian country in the 1830s. It gives the viewer a sense of European views of native peoples.

The steam engine provided for the first time an efficient way of exploiting the energy locked up in fossil fuels; it made available a seemingly endless supply of cheap energy, particularly in regions with ready access to coal. Immediately it lowered the cost of extracting coal by easing the task of pumping water from mine shafts; in combination with new spinning and weaving machines invented during the late eighteenth century, it also revolutionized the textile industry, the second-most-important sector (after agriculture) in most agrarian societies.

the political revolutions that had recently taken place in Europe and the Americas. By this time European levels of productivity had already overtaken those of the ancient superpowers of India and China.

THREE WAVES OF THE INDUSTRIAL REVOLUTION

The technological innovations of the Industrial Revolution spread in waves. Each wave spawned new productivity-raising technologies and spread industrialization to new regions. In the first wave, during the late eighteenth and early nineteenth centuries, the crucial changes occurred in Britain, although many of the innovations introduced there had been pioneered elsewhere. The most important changes were the introduction of efficient cotton-spinning machines and the Watt steam engine.

To exploit these new technologies more efficiently, entrepreneurs began to bring workers together in the large, closely supervised productive enterprises we know as factories.

In a second wave of innovations that occurred during the early and middle decades of the nineteenth century, steam engines were mounted on wheels to create the first locomotives. Railways slashed transportation costs over land, which is why they had a particularly revolutionary impact on the economies of large nations such as the United States and the Russian empire. In their turn, demand for coal, locomotives, rolling stock, and track stimulated coal and metal production and engineering. During the early nineteenth century many of these technologies spread to other parts of Europe and to the United States.

A third wave of innovations occurred during the second half of the nineteenth century. Industrial technologies

History is more or less bunk. It's tradition. We don't want tradition. We want to live in the present and the only history that is worth a tinker's damn is the history we make today. • HENRY FORD (1863–1947)

spread in North America, in other parts of Europe, and in Russia and Japan. Military humiliation at the hands of Western nations forced the governments of Russia and Japan to realize that they had to encourage industrialization if they were to survive because industrial power clearly enhanced military power. Steel, chemicals, and electricity were the most important new technologies during this wave of the industrial revolution, and new forms of organization brought banks and factories together in large corporate enterprises, the largest of which were in the United States. In Germany and the United States systematic scientific research began to play an important role in technological innovation, as did large corporations, and innovation began to be institutionalized within the structures of modern business and government.

By the end of the nineteenth century Britain was losing its industrial primacy to Germany and the United States: In 1913 the United States accounted for almost 19 percent of the world's GDP, Germany for 9 percent, and the United Kingdom for just more than 8 percent.

ECONOMIC DEVELOPMENTS

The first three waves of industrialization transformed levels of productivity. Between 1820 and 1913 the GDP of the United Kingdom increased by more than six times; that of Germany by nine times, and that of the United States by forty-one times. During the same period GDP per capita increased by 2.9 times in the United Kingdom, by 3.4 times in the lands that became Germany, and by 4.2 times in the United States. No earlier era of human history had witnessed such astonishing increases in productivity.

These growth rates were not matched in the rest of the world. On the contrary, the increasing economic and military might of the regions that industrialized first undermined the traditional agrarian economies of India,

For more on these topics, please see the following articles:

Colonialism p. 381 (v2)

Economic Growth, Extensive and Intensive p. 610 (v2)

Imperialism p. 952 (v3)

Liberalism p. 1133 (v3)

China, and the Ottoman empire. While the machine-produced textiles of the European and Atlantic powers undercut local products in other regions, their modernized armies conquered much of the world.

During the late nineteenth century interregional disparities in wealth and power increased sharply. Between 1820 and 1913 China's share of world GDP fell from 33 percent to 9 percent and that of India from 16 percent to 8 percent, while the share of the United Kingdom rose from 5 percent to more than 8 percent and that of the United States from almost 2 percent to more than 19 percent. By the end of the nineteenth century India was ruled by Britain; China was dominated commercially and even, to an extent, militarily by a conglomerate of European and Atlantic powers together with Japan; the Americas and Australasia were largely populated by migrants of European origin; much of Latin America was under the financial and commercial domination of Europe; and most of Africa and southeastern Asia had been incorporated within European empires. For the first time in human history political and economic inequalities between countries were becoming as striking as inequalities within countries. Global imperialism and the Third World are creations of the late nineteenth century.

DEMOCRATIC REVOLUTION

Economic changes were accompanied by profound social, political, and cultural changes. The peasant populations of agrarian societies were largely self-sufficient, but the urbanized wage-earning populations of industrialized societies, like the entrepreneurial classes that employed them, depended much more on structures of law and order and economic regulation that only states could provide. Governments, in turn, depended more on the cooperation of large sections of society as their tasks became more varied and complex. These changes explain the often violent renegotiation of relations between governments and subjects. The first modern democratic political systems emerged in the United States and western Europe during the turbulent second half of the eighteenth century, which the historian Robert Palmer called the "age of the democratic revolution." More democratic

Although the modern era is often thought of as more secular and rational than earlier eras, religion and faith continue to be important for many people. This photo shows a procession of pilgrims walking down the High Street of Little Walsingham, Norfolk, United Kingdom, carrying a statue of the Virgin and Child in 1997.

methods of rule granted political influence to wider sections of the population in exchange for increasing regulation as governments began to recruit into mass armies, to take detailed censuses, and to regulate life in factories, offices, and even households.

CULTURAL CHANGES

Cultural life was also transformed. Mass education spread literacy to a majority of the population in much of North America and Europe during the nineteenth century, while the emerging mass media gave citizens plenty to read and informed them of events in their own nation and the world at large. Mass education, combined with new forms of mass entertainment, also began to give citizens a more modern sense of a shared “national” identity. All religious traditions had to face the challenge posed by modern science, and most did so by incorporating some aspects of a new scientific view of reality while rejecting others. The spectacular successes of nineteenth-century science raised the prestige of science and challenged traditional worldviews.

Particularly challenging was the theory of evolution put forward by the English naturalist Charles Darwin (1809–1882), which seemed to imply that life itself might be the product of blind forces. Yet, precisely because it relied so much on rational explanations, the scientific worldview could not offer the spiritual consolation of traditional religions, which is why the challenge of science, far from destroying traditional religions, seems to have stimulated new forms of religious activity, such as evangelical forms of Christianity.

Outside the Atlantic core region the indirect effects of the Industrial Revolution were largely destructive as the growing political, commercial, and military power of Europe and North America threatened traditional political and economic structures and eroded faith in ancient ways of thinking. Rapid population growth, land short-



age, increased taxation, and new opportunities in the towns undermined village life in most of the world. However, as socialists pointed out, conditions in early industrial towns were often worse than those in the villages. Together, the slow erosion of peasant lifeways and the appalling conditions in early industrial towns created explosive social tensions in all industrializing societies.

Governments outside the core region of the early Industrial Revolution had to face the impossible challenge of trying to match European economic and military performance without undermining the traditional social and cultural structures on which their own power was based. The transition was bound to be painful because the dominant politics of the agrarian era had been based primarily on traditional forms of landlordship rather than on commerce; yet, people increasingly realized that industrialization was linked closely with commercial activity. Not surprisingly, the creation of modern forms of government frequently led to the violent breakdown of traditional social structures and systems of rule. Japan

I am inclined to think that history pays its way largely in the personal satisfaction of sitting on the fence and enjoying vicariously the trials and tribulations of men and times now ended. • AVERY O. CRAVEN (1885–1980)

was one of the few traditional societies that managed to make a transition to a modern industrial economy without destroying the fabric of its society.

By 1900 many features of the modern revolution were apparent throughout the North Atlantic core region, and, for better or worse, many other parts of the world were also beginning to feel its impact on lifeways, economies, governments, and ways of thinking.

Twentieth-Century Crisis: 1914–1945

Between 1913 and 1950 the engine of growth that had transformed so much of the world seemed to break down. Global rates of growth of GDP slowed from 1.30 percent per annum between 1870 and 1913 to 0.91 percent between 1913 and 1950. The slowdown affected all the core regions of the Industrial Revolution but was even more pronounced in the former agrarian colossi, China and India. The apparent exception to the rule was Russia, whose annual growth rate rose from 1.06 percent during the late czarist period to 1.76 percent between 1913 and 1950.

The slowdown was caused in part by a breakdown in the international banking and trading systems that had helped spread the Industrial Revolution. Between 1870 and 1950 the proportion of world production that was traded internationally actually fell. Part of the problem was that the governments of industrializing countries were still learning how best to manage rapid economic growth, and all too often, like the great agrarian empires of the past, they treated growth as a zero-sum game (a situation in which a gain for one side entails a loss for the other side) that could be won only by excluding rivals

For more on these topics, please see the following articles:

Colonialism p. 381 (v2)

Communism and Socialism p. 401 (v2)

Fascism p. 733 (v2)

Genocide p. 815 (v2)

World War I p. 2079 (v5)

World War II p. 2085 (v5)

from protected markets. The burst of imperialism during the late nineteenth century was the most obvious expression of this rivalry; another was the spread of protectionism (protection of domestic producers through restrictions on foreign competitors), and a third was the emergence of a system of defensive alliances in Europe, which helped turn a crisis in the Balkans into a global war. Distrust and rivalry among the major industrial powers clogged the arteries of international exchange that were so crucial as a source of economic growth and political stability.

After the assassination of Archduke Francis Ferdinand, the heir to the throne of the Austro-Hungarian empire, on 28 June 1914, Austria invaded Serbia, Russia intervened to defend Serbia, and Germany declared war on Russia, which dragged Russia's allies, Britain and France, into the war. The global reach of European colonial and commercial networks dragged other regions into the war. German colonies in Africa, the Pacific, and China were seized by French, British, and Japanese armies; troops and supplies came to Europe from present and former colonies in India, southeastern Asia, Africa, Australasia, and North America as well as from semicolonies such as Argentina. In 1917 the United States entered the war against Germany.

Nineteenth-century military innovations ensured that World War I would be particularly bloody. New weapons included machine guns, tanks, airplanes, and chemical weapons such as mustard gas, which could burn out the internal organs of its victims. Ironically, medical improvements kept more troops at the front, only to be slaughtered in the thousands by machine guns or artillery in often futile raids on enemy positions. Modern industrial states mobilized for "total war" effectively as they took control of national economies to supply their armies. The home fronts—where women replaced men on the farms, in munitions factories, or on the railways—were as vital to success as the armies. Indeed, the role of women during World War I was a major factor in the rapid spread of women's suffrage during the postwar years. World War I was not the first total war of the industrial era—the U.S. Civil War deserves that title more—but it demonstrated



Extract from *All Quiet on the Western Front*

Since its publication in 1929, *All Quiet on the Western Front* has remained a classic novel about the personal anguish of soldiers in war. German writer Erich Maria Remarque (1898–1970) based the novel on his own experiences as a soldier during World War I. Below is one of the most profound quotes from the book.

But now, for the first time, I see you are a man like me. I thought of your hand-grenades, of your bayonet, of your rifle; now I see your wife and your face and our fellowship. Forgive me, comrade. We always see it too late. Why do they never tell us that you are poor devils like us, that your mothers are just as anxious as ours, and that we have the same fear of death, and the same dying and the same agony—Forgive me, comrade; how could you be my enemy?

Source: Remarque, E. M. (1929). *All Quiet on the Western Front* (A. W. Wheen, Trans., p. 223). New York: Fawcett Crest.

even more powerfully the appalling scale and destructiveness of industrialized warfare, and it was the first truly global war of the modern era.

GLOBAL UPHEAVAL

A punitive peace treaty negotiated in Versailles, France, and the failure of the newly created League of Nations ensured that the rivalries that had caused World War I did not go away. In 1929 the international trading and banking system finally collapsed, leading to a depression that affected all the major capitalist powers, as well as the Asian, Latin American, and African countries that supplied them with raw materials. The Great Depression seemed to confirm the socialist prediction that the capitalist system would eventually break down. Many governments retreated even further into autarchy (national economic self-sufficiency and independence) as they saw themselves competing for a dwindling share of world resources and markets.

In 1933 in Germany a fascist government emerged led by Adolf Hitler (1889–1945). Hitler was determined to reverse the losses of World War I, if necessary through

conquest. Fascism also took hold in Italy, the birthplace of fascism's founder, Benito Mussolini (1883–1945), as well as in Spain, Brazil, and elsewhere. Fascism and socialism both reflected a deep disillusionment with the liberal capitalist ideologies of the late nineteenth century, but whereas fascists anticipated an era of national and racial conflict, in which the fittest and most powerful would triumph, revolutionary socialists framed the conflict in terms of class war that would pit capitalism against socialism.

The appearance in Russia of a Marxist-inspired state determined to overthrow capitalism was another apparent sign of the breakdown of nineteenth-century capitalism. Russia's czarist government had encouraged industrial growth but had failed (unlike the Meiji government in Japan) to incorporate within its ruling structures the entrepreneurs who would be needed to make a success of industrialization. Eventually the rapid growth of an urban proletariat (working class) and the impoverishment of increasing numbers of peasants generated a social crisis that, when combined with military defeat during the Russo-Japanese War and the huge costs of participation in World War I, led to the collapse of the Russian imperial state. Traditional elites reacted too passively to the crisis, which allowed the Bolsheviks, led by Vladimir Lenin (1870–1924), to seize power and hold on to it during a brutal civil war (1918–1920).

The Bolsheviks were radical Marxists, committed to the overthrow of world capitalism and its replacement by a society in which productive resources such as the land, banks, and all large enterprises would be owned collectively. Under Lenin's successor, Joseph Stalin (1879–1953), the Soviet government took decisive and brutal steps to build up a noncapitalist industrial society capable of challenging the might of its capitalist rivals. Employing methods of state management pioneered during World War I, the Soviet government began to manage and coordinate the entire Soviet economy, leaving no significant role to market forces. To manage rapid industrialization and rearmament, the Soviet government created a huge, powerful, and coercive state apparatus, willing and capable of acting with extreme brutality

Hegel says somewhere that all great events and personalities in world history reappear in one fashion or another. He forgot to add: the first time as tragedy, the second as farce. • KARL MARX (1818–1883)

where necessary. For a time people thought the new system might match the economic and military power of the major capitalist states. During the 1930s and again during the 1950s rates of economic growth were more rapid in the Soviet Union than elsewhere (although the lack of market prices in the Soviet command economy makes monetary comparisons difficult).

REARMAMENT

During the 1930s, in an international climate of increasing tension, all the major powers began to rearm. World War II began with attempts by Japan and Germany to create their own land empires. Japan invaded Manchuria in 1931 and China proper in 1937; Germany's expansionist drive led to war in Europe in 1939 after Germany invaded Poland. In 1941 the United States, now the largest economic power in the world, entered the war after Japan's preemptive attack on Pearl Harbor, and the Soviet Union entered the war after being invaded by Germany. World War II was fought in the Pacific and in eastern and southeastern Asia as much as in Europe, but eventually the economic and military power of the United States and the colossal mobilizational efforts of the Soviet Union helped turn the tide against the Axis powers (Germany, Japan, and Italy). World War II was even crueler than World War I. Sixty million people may have died—about 3 percent of the world's population at the time.

The war ended with the use of the most terrible weapon yet invented—the atomic bomb. The first atomic bombs were dropped by the United States on the Japanese cities of Hiroshima and Nagasaki in August 1945. Most of the casualties of World War II were civilians as the aerial bombing of cities became, for the first time, a recognized weapon of modern warfare. The extreme brutality of the war found its most potent symbol in the systematic murder by Hitler's Nazi Party of almost 6 million Jews in what has come to be known as the "Holocaust."

By the end of the war Europe no longer dominated the global economic system. The new superpowers were the United States and the Soviet Union. Each had its own allies and clients, and each represented a different path to modernity. The size and power of the Communist bloc

were enhanced by the incorporation of much of eastern Europe and by the emergence in 1949 of a Communist-dominated China led by Mao Zedong (1893–1976). By 1950 almost one-third of the world's population lived under Communist governments. Throughout this period economic growth was more rapid outside of Europe, particularly in the United States, the Soviet Union, and Japan, but also in regions such as Latin America.

The emergence of powerful anticolonial movements in southeastern Asia, India, Africa, and elsewhere marked the beginning of the end of European imperialism. In India the Indian National Congress, established in 1885, became a powerful supporter of independence, and in Mohandas Gandhi (1869–1948) it found an inspirational and creative leader whose nonviolent protests forced Britain to grant independence to the newly created states of India and Pakistan in 1947.

Despite the crises of the early twentieth century, socialist predictions of the death of capitalism were premature. Technological innovation was rapid throughout the period; the internal combustion engine entered mass production, aviation emerged (first as a weapon of war and then as a new form of commercial and personal transportation), and chemical substitutes for textiles and rubber were first produced. This was also the era of sonar, of nuclear power, and of oil. It also was an era of fundamental scientific breakthroughs, particularly in physics.

Other developments helped ensure that the capitalist engine of growth would revive and that the frenetic pace of economic growth of the nineteenth century would eventually be resumed. The managerial principles that would help revive growth first became apparent in the United States. Two developments were particularly important: mass production on assembly lines, pioneered by Henry Ford (1863–1947) in 1913, and mass consumerism, a phenomenon whose importance first became apparent during the 1920s as ordinary people began to gain access to modern goods such as cars, telephones, and radios.

BUYING INTO CONSUMERISM

Mass consumerism eventually provided a solution to the fundamental problem of underconsumption, which had

History gets thicker as it approaches recent times. • A. J. P. TAYLOR (1906–1990)

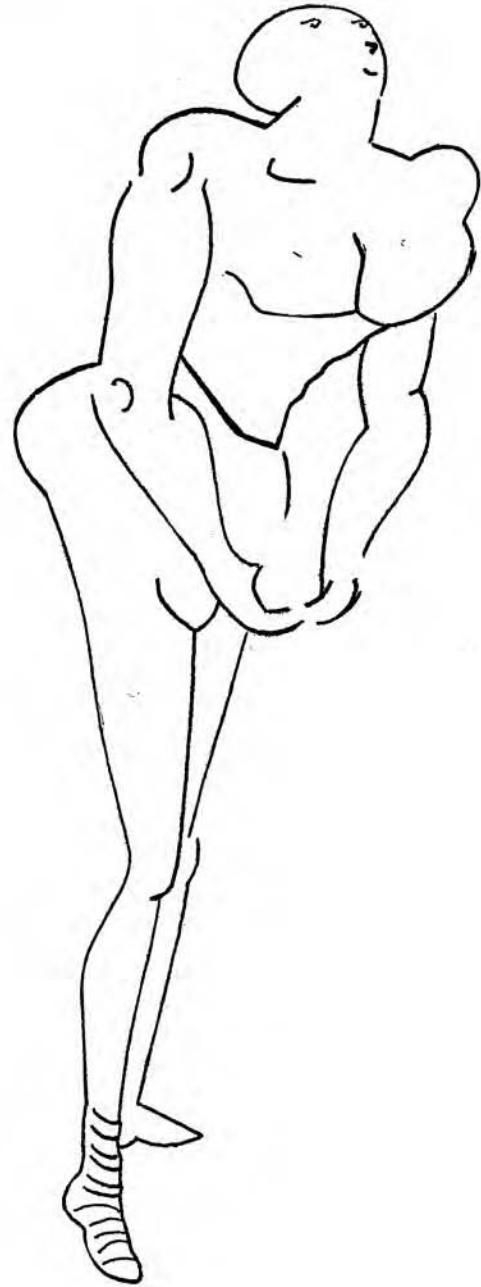
haunted producers during the nineteenth century when, as productivity rose, they had greater difficulty marketing what they produced. From at least the 1870s people had realized that capitalist economies are prone to periods of boom and bust as productivity outstrips market demand. The business cycles of capitalist economies were the modern equivalents of the agrarian era's Malthusian cycles of growth and decline, but, in a striking contrast, the business cycle was driven by overproduction, whereas Malthusian cycles had been driven largely by underproduction. During the early twentieth century people realized that raising demand might be a more promising way of ensuring long-term growth than seeking protected markets.

However, for demand to rise, governments and employers had to ensure that consumers had sufficient cash in their pockets to purchase goods and services. During the depression of the 1930s economists such as John Maynard Keynes (1883–1946) argued that governments could help revive capitalist economies not by cutting wages further, but rather by boosting consumption through devices such as the provision of unemployment payments. However, governments were already experimenting with such devices. In the United States the "New Deal" of the 1930s pumped large amounts of money into the economy through government programs mostly designed to boost spending by creating employment through the building of new infrastructure such as roads and dams.

For capitalist governments mass consumption offered another advantage that undercut some of the anticapitalist arguments of Marxism and its offshoots. During the twentieth century people realized that populations with access to increasing material wealth were unlikely to turn into the sort of revolutionary proletariat that the German political philosopher Karl Marx had envisaged as the gravediggers of capitalism. Mass consumption was the capitalist antidote to revolution.

CRISIS AND INNOVATION

In many fields the crisis period of 1914–1945 was also a period of cultural revolution. The theory of relativity advanced by the U.S. physicist Albert Einstein (1879–



This line drawing by the poet ee cummings shows the austerity typical of so-called modern art.

1955) and quantum mechanics, developed by such scientists as Niels Bohr (1885–1962), Erwin Schrodinger (1887–1961), Werner Heisenberg (1901–1976), and Max Born (1882–1970), challenged earlier mechanistic models of the universe, while the Austrian neurologist Sigmund Freud (1856–1939), by showing the importance of unconscious psychological drives, challenged

Examine the history of all nations and all centuries and you will always find men subject to three codes: the code of nature, the code of society, and the code of religion . . . [T]hese codes were never in harmony. • DENIS DIDEROT (1713–1784)

faith in the role of reason in human affairs. New art forms, such as cinema, brought artistic realism into mass culture and challenged artists and writers to experiment with new, less realistic forms of expressionism, from the cubism of painters such as Pablo Picasso (1881–1973) to the dream narrative of *Finnegans Wake* by James Joyce (1882–1941).

The new technologies of mass culture, including radio, newspapers, and particularly the cinema, offered new ways of influencing the ideas, attitudes, and fantasies of people throughout the world, and governments as well as advertisers came to appreciate their power. The Soviet government was particularly creative in using the mass media to spread its ideas. The new mass media also helped create a mass culture that could challenge the hegemony of traditional high culture. Outside of the industrial heartland, the revival of traditional religious and artistic traditions, such as those of Hinduism and Buddhism, began to play an important role in creating new national cultures that could challenge the cultural hegemony of the North Atlantic region.

Contemporary Period: 1945–Present

After World War II the capitalist engine of growth roared to life again to generate the most rapid economic growth in world history. From 0.91 percent per annum between 1913 and 1950, global rates of growth of GDP rose to 2.93 percent between 1950 and 1973 before falling to the more modest but still impressive rate of 1.33 percent between 1973 and 1998.

The international economic order was revived and restabilized by expanding markets, by massive reconstruction aid from the United States, and by the creation of global regulatory institutions such as the United Nations (in 1945) and the International Monetary Fund (in 1947). After falling between 1913 and 1950, the proportion of goods produced for international markets tripled between 1950 and 1995. A revival in international trade and the spread of mass consumerism, first in the United States and then in Europe and Japan, stimulated economic growth in all the leading capitalist coun-

tries. For the first time significant numbers of consumers in Europe and Japan began to buy private cars, televisions, and radios and even exotic foreign holidays, made possible by the reduced cost of air transportation. A new wave of innovations in electronics, many stimulated by wartime research programs, ushered in the electronic revolution of the 1980s and 1990s, and innovations in biology, including the discovery of the structure of deoxyribonucleic acid (DNA, the carrier of genetic information), spawned new techniques of genetic engineering whose implications are still unclear.

Capitalist governments became increasingly adept at sustaining growth by stimulating consumption and by seeking the right balance between intervention and laissez-faire (a doctrine opposing governmental interference in economic affairs). Slumps during the early 1970s and the late 1990s demonstrated that the business cycle has never been completely tamed. Nevertheless, many of the protectionist illusions of the late nineteenth century were shed as governments realized that in a world of rapid global growth, the wealth of individual nations (even the most powerful) usually depends more on global economic growth than on the possession of protected markets. A clearer understanding of the economic and political realities of modern capitalism explains the

For more on these topics, please see the following articles:

American Empire p. 82 (v1)
 Climate Change p. 363 (v1)
 Cold War p. 376 (v2)
 Consumerism p. 435 (v2)
 Globalization p. 849 (v3)
 Green Revolution p. 870 (v3)
 Human Rights p. 939 (v3)
 Mass Media p. 1203 (v3)
 Postcolonial Analysis p. 1502 (v4)
 Progress p. 1514 (v4)
 Religious Freedom p. 1574 (v4)
 Russian–Soviet Empire p. 1638 (v4)
 Social Welfare p. 1737 (v4)
 United Nations p. 1916 (v5)
 Urbanization p. 1925 (v5)

But even regarding History as the slaughter-bench at which the happiness of peoples, the wisdom of States, and the virtue of individuals have been victimized—the question involuntarily arises—to what principle, to what final aim, these enormous sacrifices have been offered. • G. W. F. HEGEL (1770–1831)

decision of U.S. governments to finance postwar reconstruction in Europe (through the Marshall Plan) and in Japan, even if that meant turning former enemies into commercial rivals. Partly in this spirit, and partly under pressure from indigenous anticolonial movements, European governments surrendered the empires they had conquered during the late nineteenth century.

During the forty years after 1945 roughly a hundred nations achieved independence from their European overlords, and another batch of new nations emerged after the collapse of the Soviet Union in 1991. By 2004 the United Nations had 191 members.

Industrialization spread beyond the core regions of the late nineteenth century, partly with the active support of the major capitalist powers. Economic growth was particularly rapid until the late 1990s in eastern and south-eastern Asia, in particular in South Korea, Taiwan, Malaysia, Thailand, Hong Kong, and Singapore, all of which were influenced by the Japanese model of growth.

ROCKETS AND RUBLES

Global economic growth occurred despite the partitioning of the world into two major power blocs. The capitalist and Communist powers challenged each other militarily, economically, and politically. For several decades these rivalries threatened to ignite a third world war, fought this time with nuclear weapons. However, the Cold War was also a contest for economic and political hegemony. The two blocs offered rival paths to economic growth, and for perhaps three decades people did not know whether the command economies of the Communist world or the capitalist economies of the West would generate the most rapid growth, although both sides agreed that during the modern era economic growth is the key to political and military success.

After Stalin's death in 1956 Soviet living standards began to rise as his successors steered investment toward consumer goods and housing. During the 1950s the Soviet Union enjoyed a string of successes that seemed to demonstrate the technological dynamism of its command economy. These successes included the creation of Soviet nuclear weapons and missiles, the launching of the

first space satellite, *Sputnik*, in October 1957, and the launching of the first human, Yuri Gagarin (1934–1968), into orbit in 1961.

Then, during the 1970s, Soviet growth rates began to slow, and disillusionment set in as Soviet citizens realized that their living standards were well behind those of the major capitalist countries. Although the command economy could indeed innovate when massive resources were devoted to large prestige projects, without the constant pressure of competitive markets it could not generate the trickle of petty innovations that drove productivity growth in the capitalist world. By the 1980s it was clear that the Soviet economy was failing to incorporate the new electronic technologies that were revolutionizing capitalist economies and societies. Soviet generals understood that this fact was a military as well as a technological disaster for the Soviet Union.

The failures of the Soviet economy tell us much about the driving mechanisms of the modern revolution. Soviet planners understood from as early as the 1950s that the weaknesses of the command economy derived from the lack of domestic competition and the absence of any effective equivalent of the profit motive. Even during the 1930s high rates of growth derived more from a massive, and highly coercive, mobilization of labor and resources than from real gains in efficiency. During the mid-1980s a new leader, Mikhail Gorbachev (b. 1931), admitted that the Soviet economy was grinding to a halt because it could no longer keep mobilizing new resources, as it had during the 1930s and 1940s. The Soviet system collapsed because its mobilizational strategy of growth, like that of traditional agrarian empires, although effective in military crises, stifled innovation. The failure of the Soviet command economy provides ironic support for Karl Marx's claim that capitalism is the motor of modernity.

CHINA ADAPTS

Communist China offers an apparent exception that proves the rule. During the 1950s the government of Mao Zedong tried to industrialize using the methods of Stalin. However, the economic and social disasters of the Great Leap Forward (1958–1961, a period in which the

The Marshall Plan

In a speech delivered on 5 June 1947 by U.S. Secretary of State George C. Marshall at Harvard University, Marshall laid out what would become known as the Marshall Plan. The United States was willing to offer up to \$20 billion in relief to a war-torn Europe struggling to survive after a brutal winter if the Western European nations would cooperate as a single economic unit. (Marshall also offered aid to the Soviet Union and its allies, which was rejected by the Soviet leader Joseph Stalin.) As evidenced by Marshall's words in the extracts that follow from his speech, the plan was crucial to the survival and growth of post-World War II Europe.

I need not tell you gentlemen that the world situation is very serious. That must be apparent to all intelligent people. I think one difficulty is that the problem is one of such enormous complexity that the very mass of facts presented to the public by press and radio make it exceedingly difficult for the man in the street to reach a clear appraisal of the situation. Furthermore, the people of this country are distant from the troubled areas of the earth and it is hard for them to comprehend the plight and consequent reaction of the long-suffering peoples, and the effect of those reactions on their governments in connection with our efforts to promote peace in the world.

[...]

The truth of the matter is that Europe's requirements for the next 3 or 4 years of foreign food and other essential products—principally from America—are so much greater than her present ability to pay that she must have substantial additional help, or face

economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole. The manufacturer and the farmer throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

Aside from the demoralizing effect on the world at large and the possibilities of disturbances arising as a result of the desperation of the people concerned, the consequences to the economy of the United States should be apparent to all. It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of working economy in the world so as to permit the emergence of political and social conditions in which free institutions can exist. Such assistance, I am convinced, must not be on a piecemeal basis as various crises develop. Any assistance that this Government may render in the future should provide a cure rather than a mere palliative. Any government that is willing to assist in the task of recovery will find full cooperation, I am sure, on the part of the United States Government.

[...]

Source: *Congressional Record* (June 30, 1947). Retrieved September 8, 2004, from <http://usinfo.state.gov/usa/infousa/facts/democrac/57.htm>

Chinese government tried to force the pace of industrialization by abolishing all private property) and the chaos of the Cultural Revolution (1966–1976, a period of internal chaos during which millions were accused of anticommunist activities and subjected to exile, banishment, or death), combined with the growing rift between China and the Soviet Union, encouraged the Chinese government to retreat from the Soviet ideal of total state control of the economy. After Mao's death in 1976 his

successors cautiously reintroduced elements of a market economy, and as entrepreneurial activity spread in China, economic growth accelerated. Capitalism was never entirely destroyed in China (as it had been in the Soviet Union), which is why, despite the survival of its Communist government, its economy has shifted with some success toward a competitive market economy.

Throughout the world economic growth and the many changes that have come with growth transformed lifeways

*Time present and time past
Are both perhaps present in time future,
And time future contained in time past.*

during this period. Mass education was introduced in most of the world; thus, a majority of people in most countries were introduced to the basics of literacy. More and more people lived in huge cities as improved medical, sanitary, and educational services and increasing opportunities for wage work lured people from the villages. For the first time in human history cities became healthier places than villages, at least where they were supplied with the basic amenities of clean water, sanitation, medical services, transportation, and electricity. Improved medical care explains the astonishing fact that in just thirty-five years (1955–1990), the average life span of human beings increased from about thirty-five years to fifty-five years.

Urbanization transformed gender relations as families adapted to an urban world in which women's salaries were as vital as those of men. Women have become increasingly visible in government, in education, in medicine, and in science. Yet, true gender equality, like economic equality, still seems a remote goal. Worldwide in 1990 about eighty women were in secondary education and sixty-five in tertiary education for every hundred men, and only about sixty women were in paid employment for every hundred men.

During the 1980s and 1990s new forms of electronic communications and transportation and the reintegration of the Soviet Union (and its successor states) and China into the capitalist world economy bound the world together more tightly than ever before. This new pulse of global integration has come to be known as "globalization." Globalization stimulated economic growth in most of the core industrial economies and many newly industrialized countries, although many of the world's poorer countries found the costs of competition too high and fell further behind, particularly in parts of Africa and Latin America. For better or worse, globalization also brought the world's many cultures into closer contact. As television and radio became more common even in Third World countries, the cultural norms and consumerist values of the most industrialized countries became commonplace throughout the world.

COCA-COLA CULTURE AND THE BACKLASH

The influence of the United States was particularly pervasive as consumer goods such as Coca-Cola and U.S. styles in clothing, music, sports, and entertainment became familiar throughout the world. Yet, Western influences have also generated a powerful backlash as governments and citizens in other parts of the world have tried, with varying degrees of success, to defend traditional cultural and religious values. The emergence of new forms of radical anti-Westernism is merely one reflection of growing resistance to Western values.

Resistance to Western values has been fueled by increasing global inequality. In 1960 the wealthiest 20 percent of the world's population earned about thirty times as much as the poorest 20 percent; in 1991 the wealthiest 20 percent earned sixty-one times as much. The successes of the most highly industrialized countries threw a harsh spotlight on the poverty of less industrialized regions, highlighting inequalities in income and in access to medical and educational resources and to necessities such as clean water and air. Although industrialization spread to more and more countries during the twentieth century, in too many cases it was incomplete or narrowly based on the trade in specialist commodities such as coffee or oil or managed by corrupt militaristic governments that skimmed off profits or spent them on armaments rather than reinvesting them in growth.

Although the wealth and the technologies exist to provide all humanity with basic medical care, clean water, and adequate food, millions still die from famine or water-borne diseases in the least industrialized regions of the world, and lack of appropriate education and services has contributed to the rapid spread of AIDS, particularly in southern Africa, where in some countries almost one-quarter of the adult population had AIDS during the mid-1990s. Peasants have become increasingly marginalized as traditional rural lifeways have been undermined by overpopulation, the fragmentation of landholdings, and competition from cheap overseas imports.

In much of the world the modern era has included the

*If all time is eternally present
All time is unredeemable.*

• T.S. ELLIOT (1888–1965)

death of the peasantry, the class to which most humans had belonged throughout the agrarian era. The collapse of Communism has created Third World conditions in much of the former Communist world as well. For many people, even at the beginning of the twenty-first century, the modern revolution must still seem like a distant dream. Directly or indirectly, the deep economic, political, and cultural inequalities of the modern world likely will continue to fuel bloody guerrilla conflicts in which small groups with modern weapons attempt to resist the cultural, economic, and military power of the wealthiest capitalist states.

BURNING THE CANDLE

Whereas many people have seen the dire conditions in the world's poorest countries as a sign of those countries' backwardness, others have seen such conditions as a warning of future dangers. During the second half of the twentieth century people were increasingly aware that the rapid population growth and increasing consumption of the modern era had put new pressures on the whole biosphere (the part of the earth's surface, seas and atmosphere inhabited by living things). Indeed, in *Something New Under the Sun*, John McNeill argued that, in the long perspective, the changing human relationship with the environment may turn out to be the most important of all the changes that occurred during the twentieth century.

Population growth accounts for much of the impact as cities have gobbled up farmland and forest land, as roads and highways have paved over more land, and as Third World farmers have cleared forest lands to eke out a living. However, late during the twentieth century people realized that rates of population growth were slowing throughout the world as urbanization, increasing education, and improved services simultaneously reduced the pressure to have large families and raised their cost. At present, it seems likely that global populations will level out at 9 to 10 billion toward the end of the twenty-first century.

On the other hand, consumption levels are rising in much of the world. As industrialization spreads to China,

India, Africa, and much of Latin America, and as more and more consumers begin to expect the material living standards currently enjoyed in Europe and North America, human pressure on the environment will increase even as population growth slows. Environmental strains take many forms. Habitats invaded by humans are no longer available to other species; thus, current rates of extinction may be as high as during the most rapid extinction episodes of the last 600 million years.

Some resources are already being used at dangerously high levels; this is particularly true of fisheries and clean water. However, the most dangerous of all these threats may be the impact on the atmosphere of burning large quantities of fossil fuels. Carbon dioxide is one of several greenhouse gases—gases that hold in the sun's heat and therefore tend to raise the average temperature of the atmosphere. Deforestation may have increased global carbon dioxide levels during the agrarian era, but the burning of fossil fuels since the Industrial Revolution has greatly increased these levels, from approximately 280 parts per million in 1800 to approximately 350 in 2000, and levels could reach 550–660 parts per million by 2150. The exact consequences of this human manipulation of the atmosphere are not yet clear, but they are likely to cause significant and perhaps rapid changes in global climatic patterns—changes as great as those that occurred at the end of the last ice age.

Modern Era in World History

In 1969, by landing on the moon, human beings took the first, hesitant steps toward leaving their home planet. These steps brought into focus some of the major changes of the modern revolution, reminding humans that the increasing power and complexity of human societies were bought at a price and came with dangers. Humans now have the power to destroy themselves and to do much damage to the planet. Our increased power clearly has brought responsibilities for which we are ill prepared, and the great complexity of the modern global community has created new forms of vulnerability and

The whole of contemporary history, the World Wars, the War of Dreams, the Man on the Moon, science, literature, philosophy, the pursuit of knowledge—was no more than a blink of the Earth Woman's eye. • ARUNDHATI ROY (B. 1960)

the fearsome prospect of a major collapse, similar to the collapses suffered in the past by many overambitious irrigation-based societies. On the other hand, the immense sophistication and scale of the knowledge available today hold out the promise of a managed transition to a more sustainable relationship with the biosphere.

What remains unclear, then, is whether the modern revolution will lead to the emergence of a new global system capable of relative ecological, economic, and political stability, or whether the accelerating change of the modern era is the prelude to a sudden, sharp collapse that will drive many parts of the world back to the productivity levels of the early agrarian era, if not even further. Perhaps the fundamental paradox of the modern revolution is that on the one hand human control over the biosphere has increased spectacularly; yet, on the other hand we have not yet shown that we can use that control in ways that are equitable and sustainable. We must wait to see whether the astonishing collective achievements of our species will prove ephemeral or enduring.

Further Reading

- Anderson, B. S., & Zinsser, J. P. (2000). *A history of their own: Women in Europe from prehistory to the present* (2nd ed.). New York: Oxford University Press.
- Bairoch, P. (1988). *Cities and economic development: From the dawn of history to the present*. Chicago: University of Chicago Press.
- Bayly, C. A. (2004). *The birth of the modern world 1780–1914*. Oxford, UK: Blackwell.

- Christian, D. (2004). *Maps of time: An introduction to big history*. Berkeley and Los Angeles: University of California Press.
- Davies, R. W., Harrison, M., & Wheatcroft, S. G. (Eds.). (1994). *The economic transformation of the Soviet Union, 1913–1945*. Cambridge, UK: Cambridge University Press.
- Frank, A. G. (1998). *ReOrient: Global economy in the Asian age*. Berkeley and Los Angeles: University of California Press.
- Headrick, D. R. (1990). Technological change. In B. L. Turner, W. C. Clark, R. W. Kates, J. F. Richards, J. T. Mathews, & W. B. Meyer. (Eds.), *The Earth as transformed by human action: Global and regional changes in the biosphere over the past 300 years* (pp. 55–67). Cambridge, UK: Cambridge University Press.
- Hobsbawm, E. J. (1962). *The age of revolution, 1789–1848*. New York: New American Library.
- Hobsbawm, E. J. (1977). *The age of capital*. London: Abacus.
- Hobsbawm, E. J. (1987). *The age of empire*. London: Weidenfeld & Nicolson.
- Hobsbawm, E. J. (1994). *The age of extremes*. London: Weidenfeld & Nicolson.
- Maddison, A. (2001). *The world economy: A millennial perspective*. Paris: OECD.
- Marks, R. B. (2002). *The origins of the modern world: A global and ecological narrative*. Oxford, UK: Rowman & Littlefield.
- McNeill, J. R. (2000). *Something new under the sun: An environmental history of the twentieth-century world*. New York: W. W. Norton.
- McNeill, J. R., & McNeill, W. H. (2003). *The human web: A bird's-eye view of world history*. New York: W. W. Norton.
- Palmer, R. (1959–1964). *The age of the democratic revolution: A political history of Europe and America, 1760–1800* (Vols. 1–2). Princeton, NJ: Princeton University Press.
- Pomeranz, K. (2000). *The great divergence: China, Europe, and the making of the modern world economy*. Princeton, NJ: Princeton University Press.
- Population Reference Bureau. (n.d.). Human population: Fundamentals of growth, patterns of world urbanization. Retrieved August 27, 2004, from http://www.prb.org/Content/NavigationMenu/PRB/Educators/Human_Population/Urbanization2/Patterns_of_World_Urbanization1.htm
- Wong, R. B. (1997). *China transformed: Historical change and the limits of European experience*. Ithaca, NY: Cornell University Press.
- World development indicators. (2002). Washington, DC: World Bank.



Abraham
Absolutism, European
Adolescence
Africa
Africa, Colonial
Africa, Postcolonial
African Religions
African Union
African-American and Caribbean Religions
Afro-Eurasia
Age Stratification
Agricultural Societies
AIDS
Airplane
Akbar
Aksum
Alchemy
Alcohol
Alexander the Great
al-Khwarizmi
al-Razi
American Empire
Andean States
Animism
Anthropology
Anthroposphere
Apartheid in South Africa
Arab Caliphates
Arab League
Archaeology
Architecture
Aristotle
Art—Africa
Art—Ancient Greece and Rome
Art—Central Asia
Art—East Asia
Art—Europe
Art—Native North America
Art—Overview
Art—Russia
Art—South Asia
Art—Southeast Asia
Art—West Asia
Art, Paleolithic
Asia
Asian Migrations
Asoka
Association of Southeast Asian Nations
Assyrian Empire
Augustine, St.
Aurangzeb
Austro-Hungarian Empire
Automobile
Aztec Empire

Abraham

(2ND MILLENNIUM BCE)

HEBREW PATRIARCH AND LEADER

According to the Hebrew Bible, New Testament, and Quran as well as their respective interpretive literatures, Abraham is the first human to realize and act out the divine will. Although foundational figures appear in literatures such as the *Gilgamesh Epic* that are more ancient than the Hebrew Bible (Old Testament), these have been forgotten to history and only rediscovered through archaeology and the deciphering of dead languages. Abraham first appears in the book of Genesis and serves as the original human to affirm monotheism and to act on that affirmation. The symbolic meaning and significance of Abraham differs among the three great monotheistic religious systems.

Abraham's symbolic importance is first established in Genesis, where in biblical religion he epitomizes obedience to the divine will. He obeys God's commands to leave his ancestral home for a foreign land (Genesis 12), circumcise himself and his male offspring as part of God's covenant (Genesis 17), exile his eldest son Ishmael (Genesis 21), and finally, in his greatest act of obedience, raise up Isaac, his only remaining child, as a burnt offering (Genesis 22). In return for his obedience, God promises through the divine covenant to provide Abraham with a multitude of offspring and a land in which his progeny will live.

In the Christian Bible (New Testament), Abraham's significance lies in his unwavering faith. In Romans 4,



Abraham's merit is associated less with obedience to the divine will than with his faith in God's ultimate grace. It is his faith that provides him the merit for God's having chosen him for the covenant in the first place, and the covenant becomes one of faith rather than obedience. Members of the divine covenant are, therefore, only those who demonstrate faith in the saving power of Christ (Galatians 4:21–5:1).

In the Quran, Abraham signifies human submission (the meaning of the word *Islam*) to God (2:127–128; 37:103). Abraham rebels against idolatry (37:83–99), fulfills God's commands (2:124), raises up and purifies the foundations of God's "House" in Mecca (2:125–132), and establishes his offspring there (13:37). Although the ancient Israelites and Christians and Jews predate the emergence of Islamic monotheism, they did not remain true to the divine covenants (5:12–14) because they refused to submit themselves fully to God's absolute unity (9:30). Therefore, "Abraham was not a Jew nor a Christian, but was an early monotheist (*hanif*), one who submits to God's will (*muslim*), not an idolater" (3:67). Abraham's importance is so firmly established in the foundation narrative of the Hebrew Bible that he cannot be ignored in subsequent Scriptures. Each Scripture, however, imbues a special quality to the person of Abraham and the meaning of his character.

The nature of Abraham's leadership is also depicted with some variety among the three Scriptures. The Abraham of the Hebrew Bible is a literary character with foibles and weaknesses who struggles to realize his role of lonely monotheist in an uncertain and overwhelmingly idolatrous world. When he fears for his own life, he is

willing to risk the well-being of Sarah (Genesis 12:12–13; 20:1–11), and he seems on occasion even to question God's promise (Genesis 17:15–18). By the time of the New Testament, however, religious figures have taken on a more consistently righteous character: "When hope seemed hopeless, his faith was such that he became 'father of many nations,' in agreement with the words which had been spoken to him: 'Thus shall your descendants be.' . . . And that is why Abraham's faith was 'counted to him for righteousness.' Those words were written, not for Abraham's sake alone, but for our sake too: it is to be 'counted' in the same way to us who have faith in the God who raised Jesus our Lord from the dead" (Romans 4:18–24, New English Bible). And by the period of the Quranic revelation, the biblical prophets (among whom was counted Abraham) were considered free from error. Thus Abraham, as well as David and Solomon and a host of other characters, are free of all doubt and epitomize a somewhat different prophetic image in the Quran. The strength of Abraham's intellect proves the true unity of God (Quran 6:74–79) and Abraham never doubts the divine will nor God's goodness (Quran 37:83–113).

While Abraham's role in world history is, therefore, mythic founder of monotheism, he symbolizes three different and often conflicting narratives. The competing and polemical narratives transcend the person of Abraham and bring in the other members of his family, including Sarah, Hagar, Isaac, and Ishmael as well as other scriptural characters and institutions. Not only does each narrative serve to justify a theological position, it also serves as a polemic to argue against the

Matthew 5:5—Blessed are the meek: for they shall inherit the earth. • BIBLE

theological and institutional positions of the others. This, in turn, has served to justify and fuel ongoing intellectual, economic, political, and military competition and conflict among the three monotheistic religious systems in history.

Reuven Firestone

See also Judaism; Islam

Further Reading

- Delaney, C. (1998). *Abraham on trial: The social legacy of biblical myth*. Princeton, NJ: Princeton University Press.
- Feiler, B. (2002). *Abraham: A journey to the heart of three faiths*. New York: HarperCollins Publishers.
- Firestone, R. (1990). *Journeys in holy lands: The evolution of the Abraham-Ishmael legends in Islamic exegesis*. Albany, NY: State University of New York Press.
- Firestone, R. (1991). Abraham's association with the Meccan sanctuary and the pilgrimage in the pre-Islamic and early Islamic periods. *Le Museon Revue d'Etudes Orientales*, 104, 365–393.
- Firestone, R. (in press). Patriarchy, primogeniture, and polemic in the exegetical traditions of Judaism and Islam. In D. Stern & N. Dohrmann (Eds.). *Jewish biblical interpretation in a comparative context*. Philadelphia: University of Pennsylvania Press.
- Siker, J. (1991). *Disinheriting the Jews: Abraham in early Christian controversy*. Louisville, KY: Westminster/John Knox.
- Van Seters, J. (1975). *Abraham in history and tradition*. New Haven, CT: Yale University Press.

Absolutism, European

European absolutism grew out of a need for order in the face of political and religious polarization. Absolute kings in Europe identified sectarian dissidents and aristocratic landowners as the primary culprits behind civil wars. They moved to confront these alleged villains by claiming to rule by divine right, insisting upon religious uniformity, constructing large civilian and military bureaucracies accountable only to the Crown, turning the nobility into dependent window dressing with much social but far less political power, and by exacting high excise taxes that failed to cover the escalat-

ing costs of bureaucratic spending and the social round at court. Absolutism was not unique to seventeenth-century Europe; absolute kings ruled in China, India, western Africa, the Ottoman empire, Safavid Persia, and Tokugawa Japan between 1500 and 1800. Indeed, in Europe itself, the origins of absolutism appeared when kings in England and France tried to increase their power against feudal lords and the Church between the eleventh and fourteenth centuries. These foundations began to strengthen when the “new monarchs” of Western Europe tried to stabilize and professionalize their governments in the spirit of the Renaissance. The Protestant Reformation both weakened and strengthened this tendency toward royal centralization. It unleashed popular discontent with traditional authorities (including those kings who did not share the reformers’ zeal), but it also confirmed the Erastian notion of the monarch, not the Pope, deciding the spiritual matters of countries, even in those places that remained Catholic. Absolutism in seventeenth-century Europe was just the latest and most self-conscious effort in a long push to make the king supreme in both spiritual and, thus, temporal policy.

Divine Right and Religious Intolerance

By claiming to rule only by the grace of God, rulers gained credibility and confidence. For example, Louis XIV of France (1638–1715) overcame the treacherous Fronde of his childhood by invoking divine justification for leading without either the Estates-General or ecclesiastical surrogates. After his final accession as sole ruler in 1661, he became known as the Sun King, from whom all energy and power came. His rays extended to the provinces, where his intendants carried out his wishes without his physical presence. Even after a long reign ending with disastrous wars and famines in the early 1700s, Louis still demanded and largely commanded universal respect because of the conventional belief in God’s will behind his blunders and whims. It would take the corrosive critical thinking of the Enlightenment, beginning with the next generation, to undermine slowly the passive obedience necessary for unenlightened abso-

All parties without exception, when they seek for power, are varieties of absolutism. • PIERRE JOSEPH PROUDHON
(1809–1865)

lutism to work. From a global perspective, however, Louis was neither original nor excessive in his claims for divine inspiration. A century before, Süleyman the Great of the Ottoman empire had claimed that his deity Allah anointed him as the direct deputy, or caliph, of Muhammad, the prophet of his faith. A contemporary of Louis XIV, the Emperor Kangxi of China continued the age-old tradition of receiving the “mandate from heaven,” even though he was a Manchu outsider. The emperors of Benin and Dahomey wore shoes that stood very high above the ground so as not to dirty their semidivine feet with common earth. Their god or gods all insisted, according to the monarchs, that their way was the best way for their people to worship.

By insisting upon religious uniformity, rulers hoped to pacify through codified intolerance, a strategy used more often in Europe than elsewhere. In particular, Louis XIV revoked the Edict of Nantes in 1685, exiling his Huguenot, or French Protestant, minority in the process. His grandfather Henry IV had issued the Edict in 1598, hoping to end thirty years of civil war by granting Huguenots limited autonomy in a largely Catholic France. Louis saw the Huguenots, however prosperous and assimilated, as a threat to national security largely because he saw them as a fifth column sharing the same faith as his Dutch and English rivals. To Protestants in England and Holland, Catholicism became intrinsically linked to absolutism. Yet Protestant monarchs claiming to be absolute in the German states and in Sweden could be just as insistent on their religion being the only religion of their people. In contrast, sixteenth-century Muslim rulers had tried religious tolerance as a cornerstone of their leadership. In Ottoman Turkey, Süleyman continued the early Islamic tolerance of monotheistic faiths such as Christianity and Judaism. Akbar the Great of Mughal India, a Muslim, tried to build bridges to his Hindu majority by trying to merge the two religions. This trend did not last, however. By the time Louis XIV came to power in France, later Ottomans were far more suspicious of their Christian subjects. Akbar’s great-grandson Aurangzeb, furthermore, viewed his merger as blasphemy and emphasized Islamic superiority, which doomed his

dynasty before opportunistic British and French adventurers. Of all the absolute monarchs, the most tolerant and most successful outside of Europe was Kangxi of China, but even he drew the line on ethnocentric emissaries from the Pope.

Bureaucratic Rule

To ensure religious uniformity and thus national security, monarchs needed professionals whom they could control and trust. By constructing large civilian and military bureaucracies accountable only to the Crown, rulers relied on loyal experts rather than on fickle vassals. For example, Frederick William of Prussia based his autocracy upon bureaucracy. Prussian armies and officials became synonymous with disciplined and reliable efficiency. Similarly, Peter the Great of Russia defeated Swedish and Ottoman adversaries by using uniformed soldiers paid by him rather than by individual boyars. From Spain through Austria to Sweden, agencies censored, and spies opened letters, in part to stay on the royal payroll. This feature of absolutism again was not unique to Europe. The Qing drew upon entrenched Confucian values of scholar-bureaucrats as heroes to combat the indigenous gentry. The Ottomans continued long-held Byzantine traditions of big government to rule their diverse dominions.

By turning the nobility into decorative dependents with much social but far less political power, monarchs became the major providers of patronage and hospitality at artificially ostentatious capital cities. Bureaucrats who could be fired did most of the work of local and central government by 1700, allowing aristocrats who could not be fired even more leisure time. Louis XIV’s Versailles provided the most notorious backdrops for elite partying, all done at taxpayers’ expense. At Versailles, nobles who had once fought over provinces now fought over who would attend the king’s next soiree. From Madrid to Vienna to Saint Petersburg, baroque and rococo palaces underscored the wealth and majesty of their monarchs. Indeed, Peter the Great created Saint Petersburg in 1703 as his answer to the pomp and theater of Versailles, announcing to the world that Russia was an absolutist European state with a gilded window to the West. Of course, the burden

The Theory Behind Absolutism

The following text extract is from Jean Domat's (1625–1696) Public Law. Domat was a French jurist who devoted his career to creating and setting forth a broad basis for the absolutism of French king Louis XIV.

There is no one who is not convinced of the importance of good order in the state and who does not sincerely wish to see that state well ordered in which he has to live. For everyone understands, and feels in himself by experience and by reason, that this order concerns and touches him in a number of ways . . .

Everyone knows that human society forms a body of which each person is a member; and this truth, which Scripture teaches us and which the light of reason makes plain, is the foundation of all the duties that relate to the conduct of each person toward others and toward the body as a whole. For these sorts of duties are nothing else but the functions appropriate to the place each person holds according to his rank in society.

It is in this principle that we must seek the origin of the rules that determine the duties, both of those who govern and of those who are subject to government. For it is through the place God has assigned each person in the body of society, that He, by calling him to it, prescribes all his functions and duties. And just as He commands everyone to obey faithfully the precepts of His law that make up the duties of all people in general, so He prescribes for each one in particular the duties proper to his condition and status, according to his rank in the body of which he is a member. This includes the functions and duties of each member with respect to other individuals and with respect to the body as a whole.

Source: Domat, J. (1829). *Le droit public, suite des lois civiles dans leur ordre naturel vol. 3. Oeuvres completes, nouvelle edition revue corrigée* [The public right, following civil laws in their natural order vol. 3. Complete works, new rev. corrected ed.] (pp. 1-2) (J. Remy, Ed.). Paris: Firmin-Didot.

for funding this largesse fell hardest upon the poor with regressive tariffs and sales taxes. In France especially, nobles and clergy were exempted from most taxes, largely to gain their loyalty and their indifference to royal spend-thrifts. From a global perspective, however, the most put-upon taxpayers living in an absolute state lived in Tokugawa Japan, where peasants paid almost one-half their incomes in taxes.

While raising taxes on the poor to pay for the loyalty and comfort of the well-connected, monarchs limited the wealth of their nations. This was acutely true of the European variety of absolutism. Louis XIV left France destitute, despite the fact that it was the most populous country in Europe. His legacy of national indebtedness would grow into the nightmare that set the stage for the Revolution. Under the mercantilism of the financier and statesman Jean-Baptiste Colbert, wealth was supposed to trickle down through the Sun King and his favored monopolies, particularly a domestic silk industry, to the common people. Unfortunately for him and his realm, Louis was as bad a businessman as he was a commander in chief. His protected industries were not protected

from royal graft and bureaucratic inertia; they were no match globally against more entrepreneurial English and Dutch freelancers. Adam Smith's caricature of mercantilists as craven incompetents was not far from the truth.

Limited Monarchies in the Seventeenth Century

At least three of the major exceptions to absolutist rule in Europe prospered largely because their rulers still had more limited executive power. While Poland did not last long because it lacked a strong central government and was partitioned into extinction by absolute monarchies by 1795, the Dutch Republic, England, and Scotland prided themselves on being both Protestant and relatively free of absolutism. After winning its long struggle for independence against Habsburg Spain in 1648, the Dutch Republic generated wealth that was put back into business and not back into a voracious, bloated bureaucracy. The kings of England and Scotland tried to become absolute during the seventeenth century, but their attempts failed, with one king beheaded in 1649 and one of his sons essentially fired by Parliament in 1688. Eng-

Absolutism tempered by assassination. • COUNT MUENSTER
(NINETEENTH CENTURY)

land and Scotland then imported a Dutch king, William of Orange, to rule under limits, issuing the Bill of Rights of 1689. When Britain (the union of England and Scotland after 1707) economically eclipsed the Dutch Republic in the eighteenth century, the British used Dutch ideas about banking, insurance, and stock exchanges, all of which were slow to be reproduced in absolute monarchies such as Austria, Prussia, and France.

Absolutism and the Enlightenment

While more stodgy and less dynamic than their Dutch and British counterparts, absolute monarchies in most other parts of Europe did not remain static during the second half of the eighteenth century. This partial makeover was in contrast to Muslim and Chinese contemporaries who clung much more closely to hidebound tradition. Most significantly, enlightened absolutism in Europe recast the kings as devotees of the philosophes. Frederick the Great of Prussia, the son of Frederick William, learned from Voltaire to make his bureaucracy even more professional and less arbitrary than his martinet father. His government allowed some expressive freedoms and used fewer tortures, all in the spirit of the Age of Reason. He forced his people to adopt more rational ways of farming, even making them cultivate the American potato over traditional favorites. Nevertheless, Frederick's devotion to reform was selective at best. He kept his own serfs despite rhetorical objections to the idea of serfdom, and he reserved bureaucratic positions and their accompanying privileges for the Junkers, the Prussian aristocratic landowners. Catherine the Great of Russia was even more timid in her pursuit of change. While she seemed to patronize the activities and agree with the intentions of the Enlightenment, she expanded serfdom into newly acquired territories and dropped all taxes on the nobility entirely in 1785. Other monarchs went much further than Frederick and Catherine in their embrace of directed progress for all of their people. Adhering to the Enlightenment's economic views, Charles III of Spain encouraged free trade within his empire with his famous decrees of 1778 and 1789. He also ended the practice of selling

high offices to the highest bidder, making his colonial bureaucracy more accountable and, unfortunately for his successors, more resented. Religious freedom under the Bourbon reforms paradoxically required a degree of religious intolerance: Jesuits were now seen as retrograde obstacles to progress rather than as purveyors of absolutist civilization and were expelled from the Spanish empire in 1767. While Jesuits were also expelled from the Portuguese empire in the name of enlightened despotism in 1759, Joseph II of Austria abolished discriminatory measures against Protestants and Jews in the 1780s without expelling the Jesuits. He even abolished serfdom in 1781 by royal edict.

Absolutism and Totalitarianism

Absolutism, however enlightened, should not be confused with modern totalitarianism. Absolute kings were far less powerful than modern dictators. Technologies of surveillance and propaganda used by Adolf Hitler, Joseph Stalin, and Idi Amin were unavailable to Louis XIV, Frederick William, and Kangxi. Absolute monarchs claimed sovereignty from God, while totalitarian dictators claimed sovereignty from a majority of their people. The French Revolution's most radical phase introduced a more efficient form of centralization. The most effective enlightened despot, Napoleon, ushered in the transition between the two kinds of leaders, judiciously choosing the people as a more solid and credible foundation for power than God.

Charles Howard Ford

See also Elizabeth I; Napoleon; Parliamentarianism

Further Reading

- Alexander, J.T. (1989). *Catherine the Great: Life and legend*. Oxford, UK: Oxford University Press.
- Berenstain, V. (1998). *India and the Mughal dynasty*. New York: Henry N. Abrams.
- Bulliet, R., et al. (2001). *The Earth and its peoples: A global history* (2nd ed.); Vol. 2. *Since 1500*. Boston: Houghton Mifflin.
- Burke, P. (1994). *The fabrication of Louis XIV*. New Haven, CT: Yale University Press.

At sixteen I was stupid, confused and indecisive. At twenty-five I was wise, self-confident, prepossessing and assertive. At forty-five I am stupid, confused, insecure and indecisive. Who would have supposed that maturity is only a short break in adolescence? • JULES FEIFFER (B. 1929)

- Colley, L. (1992). *Britons: Forging the nation, 1707–1837*. New Haven, CT: Yale University Press.
- Imber, C. (2003). *The Ottoman empire, 1300–1650: The structure of power*. New York: Palgrave Macmillan.
- Ladurie, E. L. (1998). *The ancient regime: A history of France, 1610–1774* (M. Greengrass, Trans.). Oxford, UK: Blackwell.
- Lynch, J. (1989). *Bourbon Spain, 1700–1808*. Oxford, UK: Blackwell.
- Massie, R. K. (1986). *Peter the Great: His life and world*. New York: Ballantine Press.
- Padover, S. (1967). *Joseph II of Austria: The revolutionary emperor*. North Haven, CT: Shoe String Press.
- Rosenberg, H. (1958). *Bureaucracy, aristocracy, and autocracy: The Prussian experience, 1660–1815*. Cambridge, MA: Harvard University Press.
- Ogg, D. (1962). *Seventeenth-century Europe* (8th ed.). New York: Macmillan Press.
- Wallerstein, I. M. (1980). *The modern world system II: Mercantilism and the consolidation of the European world*. San Diego, CA: Academic Press.

Adolescence

The term *adolescence* refers to both a chronological stage in the human life cycle and a psychological and behavioral profile understood to uniquely describe a specific category of people. Chronologically, adolescence is the transitional stage between childhood and adulthood. Psychologically and behaviorally, adolescence is a time of life characterized by emotional upheaval, risk taking, rule breaking, increased conflict with parents, uncertainty about self-identity, and heightened interest in romantic attachments and sexual activity. Although all known societies, past and present, distinguish among children, adults, and old people, adolescence is not universally acknowledged as a separate stage in the life cycle of a person. The term *adolescence* as used to indicate youthfulness seems to have appeared in the English language only at the end of the nineteenth century, and the idea of adolescence as a special developmental stage did not surface formally in Western culture until the twentieth century.

Adolescence as a distinct stage of development also appears to be absent in certain non-Western societies. Among the Cubeo people of the northwestern Amazon in South America, for example, puberty signals the arrival

of adulthood, and no distinct adolescent stage is recognized. The Cree Native Americans distinguish only between adults and nonadults; a male child is a “small man” and a female child a “small woman.” Even when a society reserves a special status for the pubescent boy or girl, the chronological age span may not overlap the familiar definition of adolescence. Thus, among the North American Chippewa people, puberty was understood to signal the beginning of a special stage of life, but that stage lasted until a person had grandchildren. Nevertheless, a stage in the life cycle comparable to adolescence is extremely common across time and geography. Virtually all of a sample of 186 cultures around the world recognize some kind of transition period between childhood and adulthood. What most differentiates adolescence across societies is the duration of the adolescent transition and the degree of upheaval experienced by the young person. The almost universal presence of adolescence across time and geography is attributable to certain universal features of human development. Variations that occur in the duration and quality of the adolescent transition are accounted for by differences in the context in which children are raised, which influence how the universal aspects of adolescence are played out in particular cases.

Universal Aspects of Adolescence

As a chronological stage of life, adolescence roughly coincides with puberty. Puberty is a complex set of physiological processes that results in physical, emotional, and motivational changes in a person. These changes include maturation of the reproductive system and associated increased interest in the opposite sex and parenting, along with maturation of secondary sex characteristics such as body size, body shape, and patterns of hair growth. All of these changes are precipitated by the activity of several hormonal systems. Puberty is also associated with maturation of certain brain functions that then affect the motivational and emotional profile of the young person. Brain changes specifically related to puberty underlie some of the psychological and behav-



Young people at fair in India enjoying and powering a ferris wheel.

ioral traits that we associate with adolescence, including increased emotionality, a thirst for adventure and novelty, antisocial behavior, and increased conflict with parents.

Because puberty is a universal feature of the human condition, all teenagers can be expected to manifest to at least some degree the expected physical, motivational, and behavioral outcomes produced by hormonal and brain changes associated with puberty.

Developmental psychologists have also long noted that pubertal changes are likely to create secondary effects that, because they are the result of the universal process of puberty, can also be expected to be universal. The first of these effects concerns how young people undergoing puberty now view themselves. The assumption is that puberty inevitably requires a new self-definition in light of the dramatic physical and motivational changes that the adolescent is experiencing and that this identity revision must result in some amount of internal emotional upheaval. The equally inevitable fact that adolescents are

now in a position to demand more power and more privileges can be predicted to create certain universal tensions between teenagers and their elders. With regard to the society at large, the senior generation is likely to resist surrendering its authority to the younger generation. Regardless of time or place, conflict between parents and adolescents can be expected to escalate as teenagers become less dependent on parents and increasingly capable of challenging parental authority.

Historical and Geographic Variations

Although the universal process of puberty may inevitably produce certain outcomes regardless of historical time or place, variations in the environmental context in which the adolescent lives can affect how adolescence is played out. Such variations can increase or decrease the degree to which emotional upheaval and interpersonal tensions will characterize the adolescent experience.

Managing the Adolescent Identity Redefinition

Many societies historically have responded to the inevitable fact of puberty by instituting initiation ceremonies of some sort that publicly recognize the changing status of maturing youth. For boys such ceremonies may include public circumcision as well as hazing and other psychological and physical challenges. For girls such ceremonies are often associated with menarche, the onset of menstruation. Often a ceremonial rite culminates in an explicit ceremony conferring adult status on the initiate. Initiation ceremonies, then, represent a public recognition that the young person is maturing physically and can be expected to begin to engage in adult behaviors. As such, initiation ceremonies provide community support for the adolescent's attempts at redefinition of self and publicly confirm that the adolescent is becoming an adult. The upheaval associated with image redefinition in such societies is likely to be relatively mild.

Initiation ceremonies have become less common or have been stripped of much of their original meaning in contemporary cultures, especially in complex hetero-

An Initiation Ceremony for Girls in Zambia

Around the world the transition from childhood to adolescence or adulthood is often marked by a formal, public ceremony. The following is a description of the chisungu ceremony for girls of the Bemba people of Zambia.

The chisungu of the Bemba is usually described either as a puberty rite for girls or as a female initiation ceremony. It consists of a long and rather elaborate succession of ritual acts which includes miming, singing, dancing and the handling of sacred emblems. In the old days the chisungu invariably preceded the marriage of a young girl, and was an integral part of the series of ceremonies by which a bridegroom was united to the family group of his bride, in a tribe in which descent is reckoned through the woman and not through the man, and in which a man comes to live with his wife's relatives at marriage rather than a woman with her husband's. . . .

The Bemba chisungu is an individual nubility rite practised for each girl, or for two or three girls together and it is preceded by a short puberty ceremony proper. When a girl knows that her first period has come she tells older women and they must "bring her to the hearth" again (*ukumufishyo peshiko*), or "show her the fire" (*ukumulanga umulilo*) since her condition has made her "cold." This is done by rites which vary slightly from locality to locality. The ukusolwela ceremony is one in which doctored seeds are cooked on a fire and the girl must pull them out and eat them burning hot. In another rite she is washed with medicine cooked in a special pot and she drinks this medicine too. She is then isolated indoors for a day or more and fed with a small ball of millet porridge cooked in new fire so that she may be made free to eat again without harming herself or others. This is the usual Bemba way of returning to the commu-

geneous societies. When no public recognition of the fact and implications of puberty is given, adolescents are left to struggle through the adolescent identity shift on their own, with the result that the shift may be prolonged and difficult. It is probably not a coincidence that the view of adolescence as a period of storm and stress, as well as the concept of the identity crisis, originated in Western culture, which lacks meaningful initiation ceremonies. In Western culture ceremonies such as the bar mitzvah (the initiatory ceremony recognizing a boy as having reached the age of Jewish religious duty and responsibility) may still be practiced, but these ceremonies no longer guarantee that the young person will now be recognized as a man, the original culmination of the ceremony.

Range of Life Choices

The adolescent experience is also affected by the range of choices open to people who are facing adulthood and need to make decisions about the course that their lives will take. The wider the range of choices, the more difficult it can be to negotiate the task of taking on new roles, and the more the need to choose will be associated with upheaval. Theoretically, important choices that a young

person might need to make upon reaching adulthood include whether or not to marry, whom to marry, whether to have children, what career path to follow, what political and religious beliefs to adopt, and where to live. In practice, any or all of these choices may be foreclosed to the person, either by circumstance or by cultural convention. Historically, because of limitations on the availability of potential spouses, absence of effective birth control technology, hardships associated with making a living, and cultural barriers foreclosing free choice of spouse, job, and the like, a young person typically had fewer choices to make regarding how his or her life would look. In contemporary heterogeneous, democratic, affluent societies, the choices that a young person can and indeed *must* make are numerous, the consequences of making such choices are momentous, and pressure to make a number of decisions about the future simultaneously is often present. Hence, the level of stress experienced during adolescence, and beyond, is expected to be higher in such societies. This difference in the constraints placed by custom and circumstance on individual life choices may explain why, until the close of the Middle Ages, the distinction between child and adult was mini-



nity a person who has passed through an unusual or dangerous state.

The girl then waits till it is convenient for her chisungu ceremony to be danced. I call this latter a nubility rite since it is clearly considered as a preliminary to the marriage ceremony; indeed, Bemba accounts frequently confuse the two. Formerly the girl came to her chisungu already betrothed, and this is usually the case today. The bridegroom plays a part in the rite in his own person, or is represented by his sister. He contributes to the cost of the rite by paying the mistress of the ceremonies. The chisungu protects the young couple against the magic dangers of first intercourse and gives the bridegroom the right to perform this act, which is thought to be entirely different from all that follow it.

Source: Richards, A. I. (1956). *Chisungu: A girls' initiation ceremony among the Bemba of Northern Rhodesia* (pp. 17, 54). London: Faber and Faber.

mized, not to mention the recognition of adolescence as a separate stage of life.

Continuities between Childhood and Adulthood

A society can either emphasize or de-emphasize the differences between childhood and adulthood in such areas as taking responsibility, participating in sexual activity, being exposed to death, and so on. When a society emphasizes continuities, or in other words de-emphasizes differences, the transition from childhood to adulthood is more likely to be short and smooth. To the extent that expectations for and the practical experience of the adolescent are dramatically different from childhood to adulthood, the transition from the one stage to the other has the potential to be long and difficult. Historically, children were incorporated into adult life at an early age, and the same often holds true in contemporary traditional societies with a subsistence economy. Children in societies of this sort take on responsibility when they are quite young, in degrees consistent with their age and capabilities, and may be making concrete and important contributions to the welfare of their families at a quite early age. Historically, chil-

dren were exposed regularly to the facts of life, including sex and death, and this exposure is also the case in many traditional cultures around the world. In many cultures teenagers are already living a fully adult life. In 52 percent of a worldwide sample of fifty-eight cultures, boys are already married by nineteen years of age, and in 96 percent of sixty-nine cultures around the world, girls are married before they are twenty. With marriage come all of the responsibilities as well as the privileges of adulthood, and whatever adolescent transition that these young people have experienced is over.

Clarity of Expectations

Related to the range of choices open to the adolescent is the clarity with which expectations regarding the behavior of the adolescent are laid out by the older generation. In many societies stages in the life cycle are associated with age grades. Each age grade is composed of people of a specified age range. A given age grade is associated with a detailed set of responsibilities and prerogatives. Explicit procedures guarantee graduation from one age grade to the next. When age grades are present in a society, adolescents usually belong to their own age grade. This fact means that adolescents know what is expected of them. It also means that adolescents understand how and when the transition out of adolescence and into adulthood will happen.

Clarity of expectations, with regard to what the adolescent must and must not do and with regard to how and when adult status will be granted, makes for a smoother and less tumultuous adolescent experience. In societies with no such clarity of expectations, adolescents, left on their own to construct their own adolescence and make their own entry into adulthood, tend to have a more unsettled adolescent experience. Societies that leave adolescents to fend for themselves may have no choice, at least as regards some features of adolescents' life. For instance, where the range of choices open to adolescents is wide, and where a society is constantly changing over time, the older generation cannot predict what adolescents need to know or do to prepare for adulthood. The trade-off for adolescent stress is opportunity in adulthood.

Snow and adolescence are the only problems that disappear if you ignore them long enough. • EARL WILSON
(TWENTIETH CENTURY)

Historical Variations in the Timing of Puberty

The major physical and psychological changes associated with puberty occur during the second decade of human life regardless of historical time or place. However, within these temporal boundaries, the environment in which a child is raised can affect the details of the onset and timing of puberty. Thus, since about 130 years ago, the age of onset of puberty has been decreasing by approximately four months each decade in some western European nations. This trend also began to appear in other countries across the world about fifty years ago. The decline in the age of onset of puberty through recent historical time, known as the “secular trend,” has been accompanied by a more rapid pace of pubertal change. Age of menarche and attainment of adult status reflect this pattern. Thus, in urban populations, where the secular trend is most evident, menarche occurs on average at the age of twelve, whereas in Papua New Guinea, where the secular trend is not in evidence, menarche does not occur until a girl is eighteen years old. The secular trend affects growth patterns in a similar way. In the United States, where the age of onset of puberty has been decreasing steadily for decades, girls reach their adult height at an average of 13 years of age, whereas U.S. boys reach their adult height at an average of 15.5 years. By contrast, among the Kikuyu people of eastern Africa, where puberty begins later, girls attain their adult height during their late teens on average and boys during their early twenties. Differences in the age of onset and duration of puberty coincide with differences in the standard of living of a population. In particular, decreases in a child’s level of exposure to disease, increased quality of nutrition, and improved health of the mother during pregnancy seem to be causes of the secular trend.

The secular trend has important implications for the adolescent experience for a number of reasons. Obviously earlier onset of puberty will mean earlier expression of the psychological and behavioral traits associated with adolescence. Less obviously, when onset of puberty is accelerated as rapidly as it is by the secular trend, a society’s expectations about its young people may not be

keeping up with biological reality. If young people who are physically, sexually, and psychologically precocious in comparison with the same age cohort of just a generation ago are treated as if they were children, both the young people and the society will experience disruptions.

The secular trend has another far-reaching effect on the adolescent and the community. Hormonal and brain changes associated with puberty account for some, but not all, of the maturation of a person during and after the teen years. Cognitive skills such as the ability to plan, to control impulses, and to appreciate the long-term consequences of one’s actions also become more sophisticated with age but develop independently of the hormonal and brain changes associated with puberty per se. Thus, a dissociation exists between the maturation of physiological and motivational changes associated with puberty and the development of cognitive skills that allows for thoughtful, disciplined, forward-looking planning. Acceleration of puberty does not lead to earlier maturation of cognitive skills, which, therefore, lag further and further behind with the earlier and earlier onset and faster and faster rate of puberty. Before the secular trend, the tendency of sexually mature adolescents to act on impulse, take risks, break rules, and seek novelty was more likely to be offset by an increasing capacity to think clearly about the meaning and consequences of their actions. With the appearance of the secular trend, adolescents are able and willing to behave in ways that can have harmful, even tragic, consequences but do not always have the cognitive resources to inhibit such behavior. Historically, we seem to be witnessing a growing disconnect between what actions adolescents want to take and can take and how adolescents reason about those actions.

Gwen J. Broude

See also Childhood; Initiation and Rites of Passage

Further Reading

- Aries, P. (1962). *Centuries of childhood*. New York: Vintage Books.
 Dahl, R. (2003). Beyond raging hormones: The tinderbox in the teenage brain. *Cerebrum*, 5(3), 7–22.
 Hall, G. S. (1904). *Adolescence*. New York: Appleton-Century-Crofts.

Advice to Persons About to Write History—
Don't. • LORD ACTON (1834–1902)

Schlegel, A., & Barry, H., III. (1991). *Adolescence: An anthropological inquiry*. New York: Free Press.

Worthman, C. (1999). Evolutionary perspectives on the onset of puberty. In W. Trevathan, E. O. Smith, & J. McKenna (Eds.), *Evolutionary medicine* (pp. 135–164). New York: Oxford University Press.

Africa

Africa has played a number of often contradictory roles in the writing of world history. Indeed, perhaps no single world region has played so contentious a role in the field. Africa has been derided by some scholars as irrelevant to world history. Conversely, others have argued that Africa lies at the very center of human history. What could possibly account for such utterly incompatible perspectives? The answer to the question is itself historical. Over the past several hundred years, the history of Africa has been viewed through a variety of lenses, and these lenses have greatly influenced the way the history of Africa has been understood. Similarly, as the range of academic thinking has expanded and diversified in recent years, so have the number of lenses for understanding Africa. Rather than seeing the various contradictory notions of Africa as a failing of history, however, it might be more useful to look at the situation as instructive. By examining the great variety of ways in which Africa has been understood in the past few hundred years, we gain a remarkable insight into not only the complex part of the world known as Africa, but also into the growth and development of the field of world history itself.

Origins of the Name Africa

The very origin of the name *Africa* is contentious. The most common scholarly explanation is that it comes from the Roman *Africa terra*, or “land of the Afri” in reference to a Berber-speaking society that once lived in what is now Tunisia. One alternative explanation is that it comes from the Latin *aprica* (sunny) or the Phoenician term *afar* (dust). An Arabic term, *Ifriqiya*, is often assumed to come from the Roman, though some argue that the Latin term came from the Arabic. There is also an Afro-

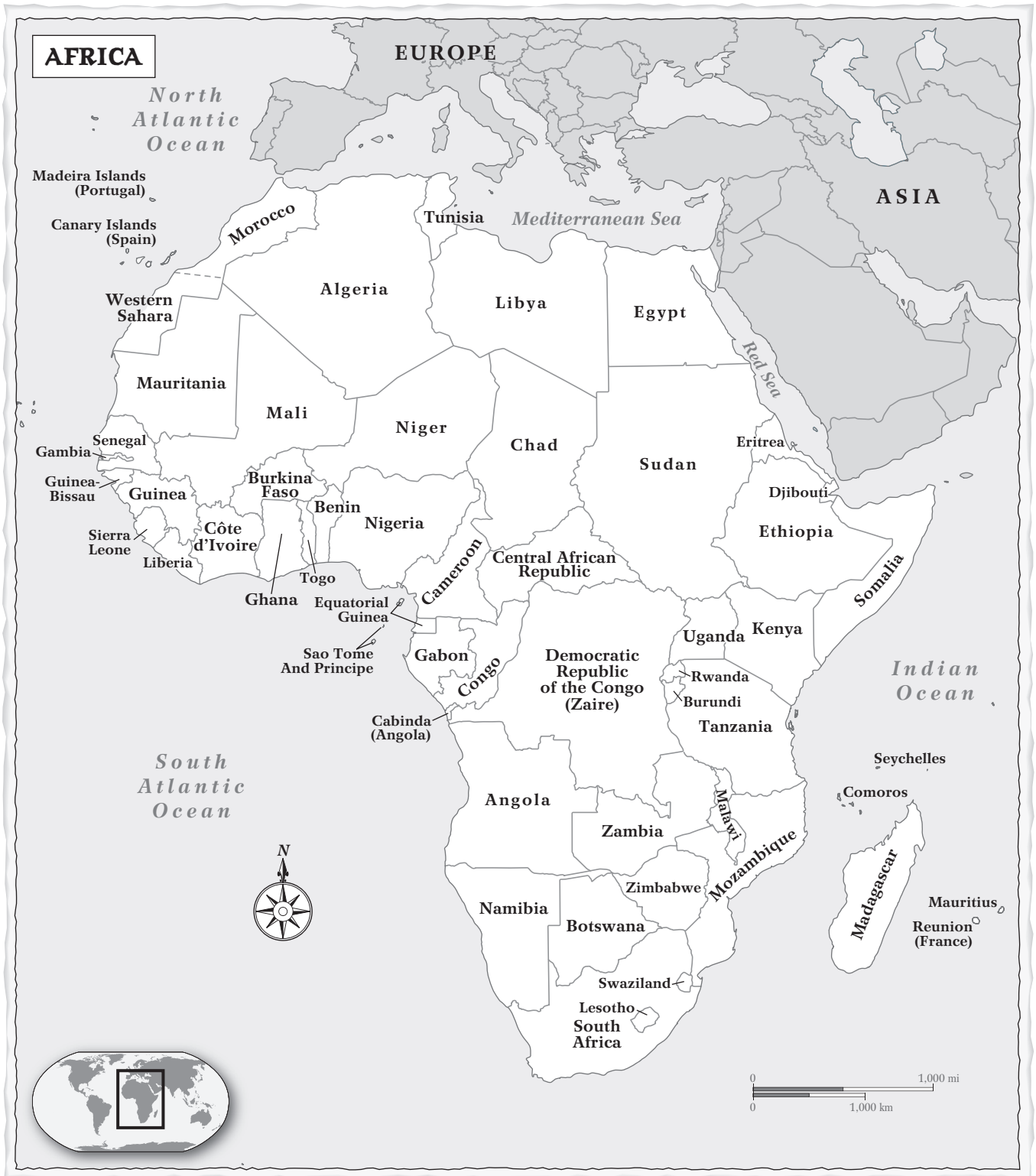
centric argument that the term is actually ancient Egyptian in origin, from *Af-Rui-Ka*, meaning “place of beginnings.” Whatever the origins of the term, by the fifteenth century *Africa* was winning out against competing terms such as *Ethiopia* and *Libya* to become the common identifier for the continent. If one looks at maps of Africa produced during the fifteenth through seventeenth centuries, one can see *Africa* increasingly come to dominate as the name of the continent. The controversy over the landmass’s name serves as foreshadowing for the deeper conflicts over its meaning and relevance in world history.

Early Conceptions of Africa

The field of history as we know it today is largely a Western European creation. It should be no surprise, then, that the earliest attempts at writing histories of the world



This early-twentieth-century book shows the vastness of Africa by superimposing four other regions on its map.



We are not guardians of the earth for our children. It is our children's land which they are lending to us. • KENYAN PROVERB

are themselves European. Particularly during the Enlightenment, European philosopher-scholars were trying to make sense of a world that was to them very new. European voyages of exploration and colonial expansion had resulted in a great deluge of information about the wider world, and these early scholars struggled to pull the information together into a whole that explained the world as they were experiencing it. Thus, just as new cartographic skills were creating an increasingly detailed picture of physical Africa, these scholars sought to create an explanation of Africa's place in world history.

Notably, prior to the modern era, Africa was not seen as a terribly different part of the world. Given the long interaction among Europe, Africa, and the Middle East, all had previously been seen as part of a single world, as is evident from premodern maps. Indeed, trade, the Roman empire, and then Christianity had helped create a high degree of shared culture and identity in the circum-Mediterranean region, such that Africa was probably seen as more a part of the Roman Christian world than were many parts of northern and eastern Europe. This legacy survived even the collapse of Rome and the rise of Islam, for example in the myth of Prester John, a supposed Christian king sometimes placed in distant parts of Asia and sometimes in Africa. For a very long time, then, Europeans often saw Africans in terms of similarity and affinity, not difference. Early Islamic travelers and scholars, too, while initially seeing the Dar al-Sudan (land of the blacks) as a very different place, increasingly came to accept regions of it as part of the Dar al-Islam (land of peace).

Racial and Civilizational Views of Africa

However, in their efforts to place Africa in world history, most Enlightenment historians were deeply influenced by two issues. First, they tended to think of historical evidence only in terms of written documents. Thus, because they were either unable to translate (as in the case of ancient Egyptian) or unaware of written documents of African origin, these scholars decided that Africans were without history. Second, and perhaps more importantly, they were deeply influenced by growing notions of Euro-

pean racial superiority. Born of the achievements of the scientific revolution and the creation of a new plantation economy that demanded a brutal system of slave labor, most European scholars of the time embraced the notion that nonwhite peoples were intrinsically inferior. Witness the following excerpt from David Hume's essay "Of National Characters" (1748):

I am apt to suspect the negroes and in general all other species of men to be naturally inferior to the whites. There never was a civilized nation of any other complexion than white, nor even any individual eminent either in action or speculation. No ingenious manufactures amongst them, no arts, no sciences.

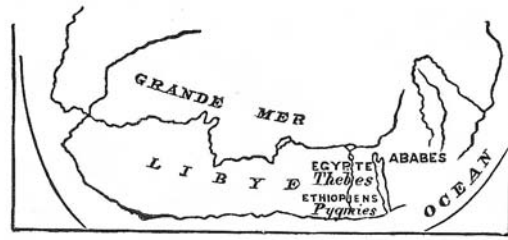
G. W. F. Hegel's "Geographical Basis of World History" (1820s) reflected similar themes. Hegel divided Africa up into three regions: North Africa, Egypt, and "Africa proper." Hegel describes the region thus:

Africa proper is the characteristic part of the whole continent as such . . . It has no historical interest of its own, for we find its inhabitants living in barbarism and savagery in a land which has not furnished them with any integral ingredient of culture. From the earliest historical times, Africa has remained cut off from all contacts with the rest of the world; it is the land of gold, forever pressing in upon itself, and the land of childhood, removed from the light of self-conscious history and wrapped in the dark mantle of night.

Hegel's characterization of Africa in world history includes several key elements that continued to be used to define Africa (and Africans) in world history for more than a hundred years. First is the racial division of Africa. North Africa and Egypt, where people were "less black," were judged to possess history, while black Africans were devalued as uncivilized, living in barbarism, and devoid of culture. Second, "Africa proper" was described as being isolated from other parts of the world and thus peripheral to world history. Third, Africans were defined as childlike—not fully mature (as opposed to Europeans). Such a characterization was a critical element in the paternalistic justification of European authority, first in the context of slavery and later in the imposition of colonial rule.



AFRICA IN HOMER'S WORLD.



AFRICA IN MAP OF HEKATÆUS.
500 B.C.

This map and the ones that follow show evolving European knowledge of Africa.

During the course of the early twentieth century, a somewhat different twist on the racial model of world history became prominent, and this was the notion of civilizations. Historians of this era, such as H. G. Wells, Arnold Toynbee, and James Breasted, built their analysis and presentation of world history around the presumed racial and cultural continuity of certain civilizations. Not surprisingly, these scholars placed European civilization at the pinnacle of a human hierarchy, with other civilizations, such as Chinese or Persian, playing at best supporting roles. Like the Enlightenment historians before them, these scholars left Africa out of the picture, owing both to African's presumed uncivilized nature and the absence of historical documentation. In the 1937 edition of his *The Conquest of Civilization* Breasted dismissed Africa as separated from the "Great White Race" by the Sahara and therefore uninfluenced by civilization:

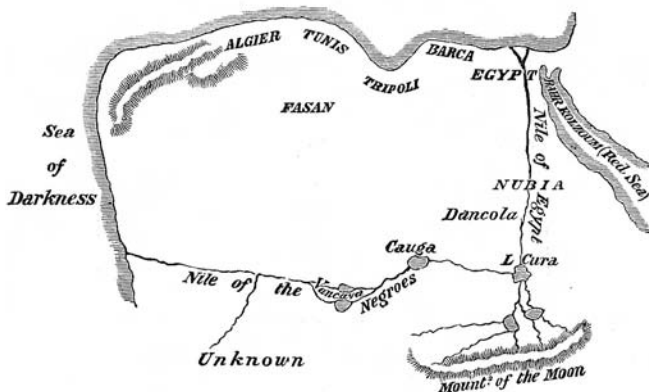
On the south of the Northwest Quadrant lay the teeming black world of Africa, as it does today. It was separated

from the white race by the broad stretch of the Sahara Desert. Sometimes the blacks of inner Africa did wander along [the Nile] into Egypt, but they only came in small groups. Thus cut off by the desert barrier and living by themselves, they remained uninfluenced by civilization by the north, nor did they contribute appreciably to this civilization.

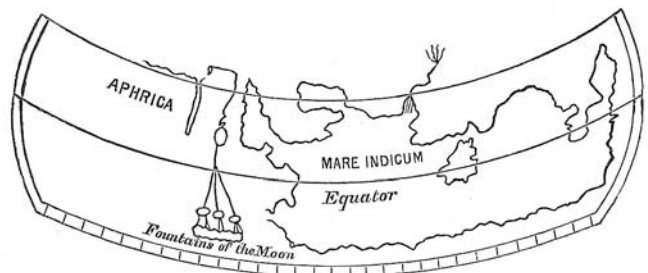
Thus the civilizational model did not so much displace race as a means of defining world history as incorporate it into a larger framework. Race and civilization came to mean much the same thing, and, as before, Africa and Africans played a role in world history only as the uncivilized foil to Europe's achievement and sophistication.

Early Twentieth-Century Black Scholarship

The twentieth century, however, witnessed a number of challenges to the concepts of whiteness and civilization that had been constructed by earlier world historians. The first of these challenges came from a group of African-American scholars that included such pioneers as Carter G. Woodson and W. E. B. Du Bois. Both held PhDs from Harvard University and published extensively on black history. Woodson, for example, helped found the *Journal of Negro History*. Du Bois, one of the most prolific writ-



CENTRAL AFRICA according to EDRISI. 1154 A.D.



MAP OF THE MARGARITA PHILOSOPHICA A.D. 1503



HIPPARCHUS.

100 B.C.



PTOLEMY'S MAP. A.D. 150.

ers of the age, directly challenged the notion of Western cultural primacy with such essays as “What is Civilization” (1926). Both scholars did much to undermine the notion that Africans were without history.

Also of early significance was the Senegalese scientist and historian Cheikh Anta Diop, whose doctoral dissertation at the Sorbonne created a sensation in the 1950s by arguing that the ancient Egyptians had been black, rather than white. Diop’s work became a foundational element of the Afrocentric perspective on Africa, which argues that there was a coherent black civilization that had its roots in ancient Egypt. Afrocentrism has increasingly come to represent a counterpoint to Eurocentrism. Indeed, other Afrocentric scholars, such as George James, have even carried the argument further, making the case in *Stolen Legacy* (1954) that ancient Greek culture, rather than being a local innovation, was stolen from Egyptian culture. The argument over the relationship (or lack thereof) between Greece and Egypt continues to be a contentious one to this day. Witness, for example, the extensive debate between Martin Bernal (author of *Black Athena*) and Mary Lefkowitz (author of *Not Out of Africa: How Afrocentrism Became an Excuse to Teach Myth as*

History). Notably, while the Afrocentric perspective has helped to undermine notions of white superiority, it has not made a break with, but rather has embraced, an overtly racial notion of historical analysis. Indeed, more extreme exponents of Afrocentrism have argued that only those of African descent can truly understand, and hence study, African history. In a scholarly world that increasingly sees race as a social construction, such essentialist frameworks have become less and less popular.

The Rise of Area Studies

In the 1950s, the rise of area studies programs helped to further undermine the old Eurocentric models of world history. In the United States, the creation of a number of government-subsidized African studies programs provided an institutional foundation for a systematic study of African history. During the 1950s and 1960s a new generation of Africanists in Africa, the United States, and Europe helped develop an interdisciplinary historical methodology that embraced not only written documents, but also oral histories, linguistics, and archaeology as a



JOHN RUYSCH

A.D. 1508.



SYLVANNUS' MAP

A.D. 1511

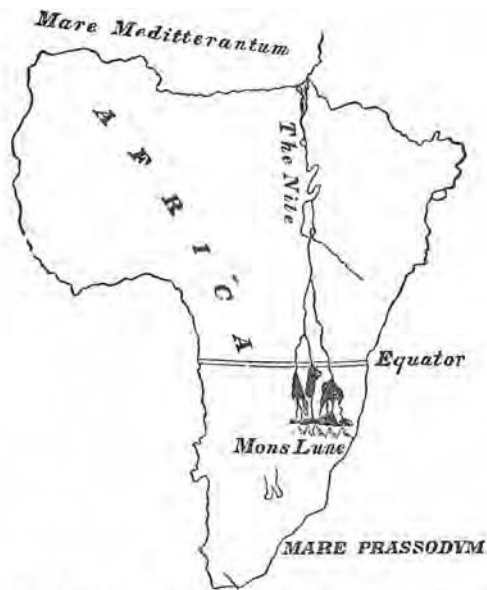


HIERONIMUS DE VERRAZANO
1529

means of reconstructing the African past. Over the decades since, the results of this research have established a rich and varied historiography. Such a body of historical knowledge could not be ignored by world historians, and as a result world history texts could no longer discount Africa as being without history.

However, the area studies model was not without its drawbacks. In particular, the organization of different parts of the world into apparently coherent areas (largely based upon continental divisions) ascribed a meaning to units no more precise than the older concepts of race or civilization. Notably, world history textbooks followed the new structure of the field by basing their chapter organization on area studies frameworks, leading to a “meanwhile, in Africa” approach to the continent. Such a framework did little to undermine the old notion of an isolated Africa or of the idea of culturally coherent civilizations that had previously been advocated by the likes of Hegel and Breasted, or even Diop. The 1980s and 1990s saw a challenge to these notions via the rise of concepts such as zones of interaction, which stressed the connections between regions rather than the difference between them. Regions such as “the Atlantic world” or “the Indian Ocean world” replaced continents as units of analysis. As Patrick Manning, one of a growing group of Africanists who have greatly influenced world history in recent years, argued in his 2003 work *Navigating World History*, it is the connections that make world history, not the separations.

Because these new regional units of analysis build on zones of interaction rather than on continents or civilizations, they threaten to deconstruct the very area studies frameworks that have done so much to further the



SEBASTIAN CABOT'S MAP OF THE WORLD
16th Century

history of Africa and other previously neglected regions of the world. The point here is that the changing “concepts” of Africa highlight that the concept of Africa itself is a construction, no less than that of race or civilization. The meaning of Africa, thus, has held different things for different audiences over time. Some based more in historical fact, and others based more in cultural and political agendas, perhaps, but all very real in terms of the impact on their audience’s conceptions of world history. The changing notions of Africa highlight the fact that our understanding of both Africa and the world has been both interrelated and constantly changing for the past several hundred years. Indeed, it is rather difficult to understand the one without the other.

Jonathan T. Reynolds

See also Africa, Colonial; Africa, Postcolonial; African Religions; African-American and Caribbean Religions; Afro-Eurasia; Aksum; Apartheid in South Africa; Art—Africa; Benin; Egypt—State Formation; Egypt, Ancient; Equatorial and Southern Africa; Hausa States; Kanem-Bornu; Kenyatta, Jomo; Kongo; Mali; Mansa Musa; Mehmed II; Meroe; Nkrumah, Kwame; Nubians; Pan-Africanism; Pastoral Nomadic Societies; Senghor, Leopold; Shaka Zulu; Slave Trades; Sokoto Caliphate; Songhai; Trading Patterns, Trans-Saharan; Tutu, Desmond; Wagadu Empire; Warfare—Africa; Zimbabwe, Great

I believe in the brotherhood of all men, but I don't believe in wasting brotherhood on anyone who doesn't want to practice it with me. Brotherhood is a two-way street. • MALCOLM X (1925–1965)

Further Reading

- Bates, R. H. Mudimbe, V. Y., & O'Barr, J. F. (Eds.). (1993). *Africa and the disciplines: The contributions of research in Africa to the social sciences and humanities*. Chicago: University of Chicago Press.
- Breasted, J. H. (1938). *The Conquest of Civilization* (pp. 44–45). New York: Literary Guild of America.
- Diop, C. A. (1974). *The African origins of civilization: Myth or reality*. New York: L. Hill.
- Maeterlinck, M., & Mukerji, D.G. (Eds.). (1926). *What is civilization?* New York: Duffield.
- Eckert, A. (2003). Fitting Africa into world history: A historiographical exploration. In B. Stuchey and E. Fuchs (Eds.), *Writing world history 1800–2000* (pp. 255–270). New York: Oxford University Press.
- Ehret, C. (2002). *The civilizations of Africa: A history to 1800*. Charlottesville: University of Virginia Press.
- Eze, E. C. (1997). *Race and the enlightenment: A reader* (pp. 33, 124). Cambridge, UK: Blackwell.
- Gilbert, E., & Reynolds, J. T. (2004). *Africa in world history: From pre-history to the present*. Upper Saddle River, NJ: Prentice Hall.
- Manning, P. (2003). *Navigating world history: Historians create a global past*. New York: Palgrave MacMillan.
- Miller, J. (1998). History and Africa/Africa and history. *American Historical Review*, 104(1), 1–32.
- Thornton, J. (1992). *Africa and Africans in the making of the Atlantic world, 1400–1680*. New York: Cambridge University Press.
- Vansina, J. (1994). *Living with Africa*. Madison: University of Wisconsin Press.
- Waters, N. L. (Ed.). (2000). *Beyond the area studies wars: Toward a new international studies*. Hannover, NH: Middlebury College Press.

Africa, Colonial

The colonial era in African history was relatively brief, but it was decisive in shaping Africa's relationship with the twentieth-century world. The legacies of colonialism are still felt broadly and deeply across the continent.

Creating a Colonial Order, 1880 to 1914

Until late in the nineteenth century, almost all European interaction with Africa took place along the coasts. An exception to this was the area around the Dutch settlement of Cape Town, where a frontier of European settlements developed in the late seventeenth century. By the late nineteenth century it was an array of technologies that made European conquest possible: medical technologies (such as the discovery of quinine as a prophylactic against

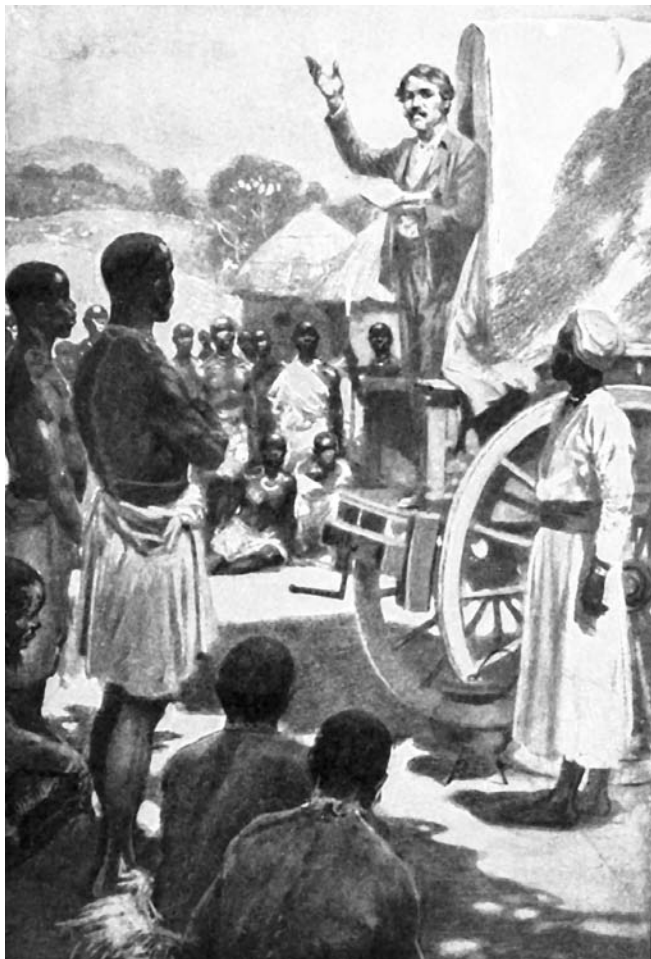
malaria), transportation technologies (such as steamships and railroads to penetrate the interior), and military technologies (such as the rapid-repeating Maxim gun).

Several factors drove the European scramble for Africa. In the industrial era, competition for the resources of the tropical world, such as rubber and cotton, intensified. The rise of the powerful new German state added a political and strategic dimension: The British now had to work to defend the global trade dominance they had earlier taken for granted, and the French sought new territories in Africa partially as compensation for their losses in European wars. New nations like Italy and Germany pursued empire as a form of national self-assertion. Christian missionaries were another constituency promoting empire, explaining it as a means of bringing “civilization” to what Europeans came to regard as a “dark continent.” Similar factors were at play in other world regions that had heretofore escaped European colonization, such as Southeast Asia and the Pacific Islands.

Alarmed by the aggressive imperialism of King Leopold II of Belgium, other European nations sent delegates to the Berlin Conference in 1884 to create ground rules for their “effective occupation” of African lands. Leopold's huge fiefdom in Central Africa, the “Congo Free State,” was a brutal military-economic empire. As many as 10 million Africans died as the region's rubber was plundered to feed industrial and consumer markets in the West.

African responses to the challenge of European imperialism were complex, conditioned by the rapidity with which the colonialist enterprise unfolded. Diplomacy was a common approach. Particular rulers and societies might benefit from allying themselves with the Europeans, as did the kings of Buganda, north of Lake Victoria, who expanded their territory at the expense of traditional rivals by allying themselves with the British. But the Europeans were organized on a scale that African states could not match, and one by one African societies lost their sovereignty.

African wars of resistance to colonial occupation were common in the period from 1890 to 1910, but successful only in Ethiopia. King Menelik II (1844–1913) built



In this drawing, the Protestant missionary David Livingstone is shown preaching to potential African converts. Conversion to Christianity was a component of European colonialism.

while the French cultivated an elite of Africans who associated themselves with French values. As in Vietnam, these *indigènes évolués* (“evolved natives”) could even aspire to French citizenship. However, for most Africans such opportunities meant nothing, and forced labor and authoritarian colonial directives were the norm.

Belgian administration was even more paternalistic than the others, with the Catholic Church and mining companies leaving little room for African participation in state institutions. Portugal, a poor country with few resources to invest, did even less to prepare Africans for participation in a modern state. A crucial distinction was whether the Europeans came to settle. In French Algeria, Portuguese Angola, British Kenya and Rhodesia, and in South Africa, it was the settler factor that dominated all other aspects of political and economic life. Here Africans were dominated by aggressive European immigrants who came not just to govern them, but to take their land.

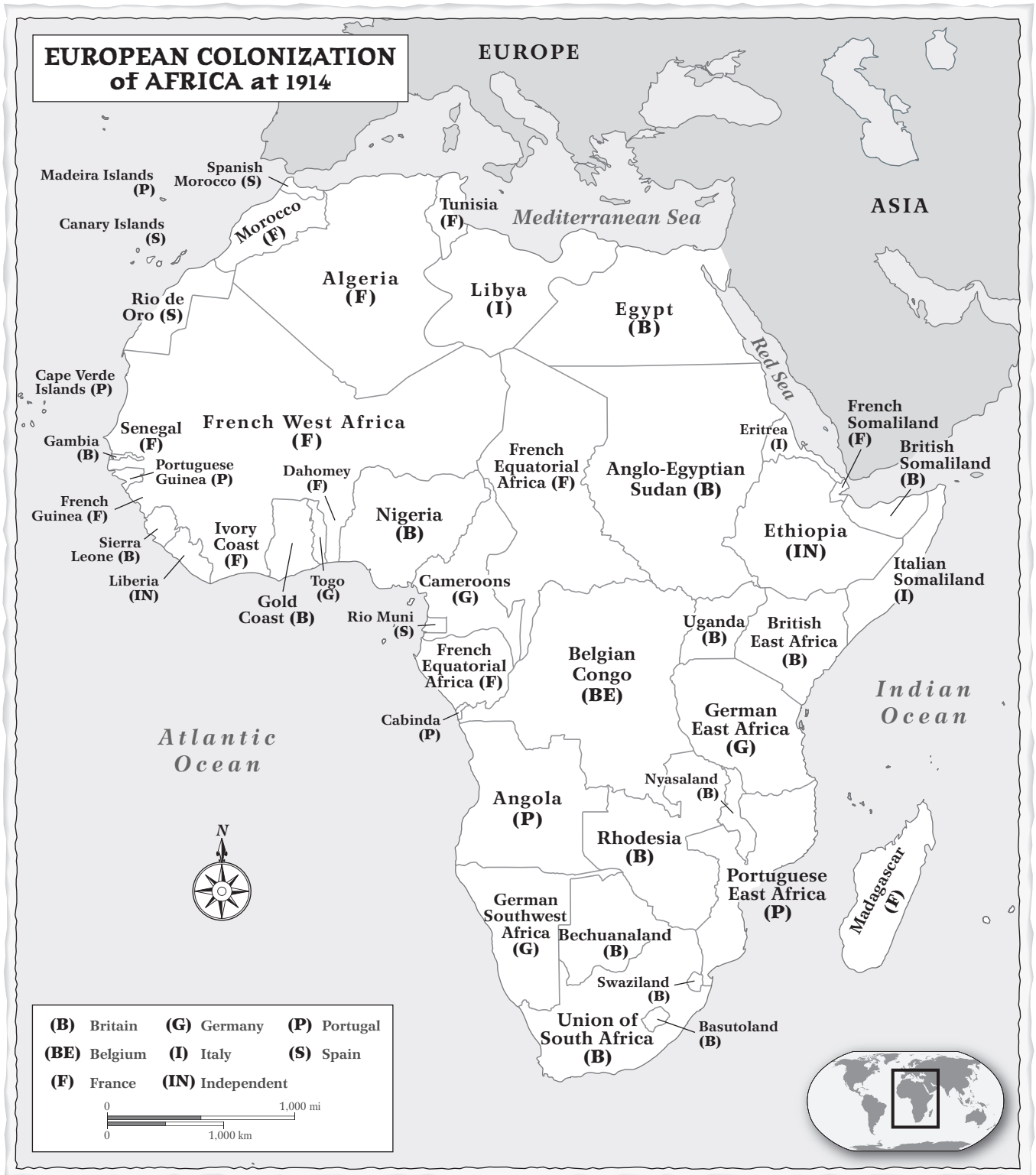
Settler-dominated farming in these regions was one form of what economic historian Ralph Austen has called “regimes of competitive exploitation.” To provide labor for settler farms, mining enterprises, and commercial plantations, Africans were often restricted to crowded “native reserves” (to use the South African term) where, unable to meet demands for tax payments to the state, they were forced into a cycle of migrant labor. With the loss of labor and the overuse of inadequate land in the reserves, African agricultural productivity declined. Women were usually left to shoulder the burdens of rural poverty.

The second economic pattern identified by Austen is the *peasant-étatiste* regime. Here basic factors of production—land, labor, and cattle—remained in African hands. But peasant life was greatly altered by the mandate to produce goods for the global economy: Colonial taxes had to be paid in cash, and that meant growing commercial crops. In some cases African initiative was evident, as in the Gold Coast (today’s Ghana), where African farmers responded to market incentives by making the colony the world’s largest producer of cocoa. In many cases, however, market incentives were so weak that

a professional standing army, equipped it with the latest rifles, and played European powers off one another. Victory over the Italians in 1896 allowed Ethiopia to retain its status as an indigenous kingdom. But like independent Siam (Thailand) in Southeast Asia, it was but a modest exception to the rule of direct imperial control being imposed by Europe. For Africa as a whole, the period from the Berlin Conference through World War I (1884–1918) was a period of instability, violence, and population loss.

Colonial Political Economy, 1914 to 1940

During the period from 1918 to 1940, the European powers devised a number of strategies to allow them to govern colonies and benefit from them economically. The British grafted the colonial state onto existing African institutions through a system known as “indirect rule.” Traditional “chiefs” of African “tribes” administered “customary law” under the guidance of British officials. Mean-



Resolution on Imperialism and Colonialism in Africa, 1958

The excerpt below is extracted from a resolution formulated at the All-African People's Conference, held in Accra, Ghana, 5–13 December 1958.

Whereas the great bulk of the African continent has been carved out arbitrarily to the detriment of the indigenous African peoples by European Imperialists, namely: Britain, France, Belgium, Spain, Italy and Portugal.

(2) Whereas in this process of colonisation two groups of colonial territories have emerged, to wit:

(a) Those territories where indigenous Africans are dominated by foreigners who have their seats of authority in foreign lands, for example, French West Africa, French Equatorial Africa, Nigeria, Sierra

Leone, Gambia, Belgian Congo, Portuguese Guinea, Basutoland, Swaziland and Bechuanaland.

(b) Those where indigenous Africans are dominated and oppressed by foreigners who have settled permanently in Africa and who regard the position of Africa under their sway as belonging more to them than to the Africa, e.g. Kenya, Union of South Africa, Algeria, Rhodesia, Angola and Mozambique.

(3) Whereas world opinion unequivocally condemns oppression and subjugation of one race by another in whatever shape or form.

(4) Whereas all African peoples everywhere strongly deplore the economic exploitation of African peoples by imperialist countries thus reducing Africans to poverty in the midst of plenty.

colonial officials used coercion to force African production. Such was the case with cotton, which apart from bringing little revenue to African farmers required significant labor and exhausted the soil. Forced cotton growing was the cause of several revolts against European authority.

Colonial economics led to regional differentiation. The transportation infrastructure, geared toward the export of raw materials and the importation of manufactured goods, concentrated investment and development in certain areas while draining labor from others. In West Africa, the coastal regions were developed at the expense of the more arid savannas of the interior. In South Africa, the “white” areas of the country—the settler farming regions and the increasingly industrial cities and mine compounds—were developed at the expense of “native reserves.”

Africa and the Twentieth Century, 1914 to 1994

While colonial Africa had distinctive traits, it is best understood in the context of twentieth-century world history. During World War I (1914–1918) the Europeans mobilized the human and natural resources of their empires. While Indian soldiers fought for Britain in its fight with Germany's Ottoman allies, the famous Senegalese Sharpshooters, young men from West African vil-

lages, served in the trenches of Europe. East and Southwest Africa were theaters of war as the Germans defended their colonies from British and South African attack. Most of the soldiers were African, with European officers in command. Great civilian suffering resulted from forced conscription and the spread of disease and hunger that accompanied the fighting.

Representatives of Africa's fledgling nationalist movements went to Paris in 1919, but like their Asian colleagues their voices were ignored by the great powers. The war had set in motion a process that would undercut the viability of European colonial empires—for example, by forcing the British to cash in many of their global financial assets to finance their struggle with Germany. Rather than recognizing and acting on that historical shift, however, the British and French augmented their existing empires through the “mandate system,” which reallocated former German colonies (and Ottoman provinces) to the victorious allies.

In the 1920s, colonial administrative and economic systems developed in a context of rising prices on world commodity markets. Soaring African production of coffee and cocoa led to increased tax revenues. But the Great Depression brought an end to that period of relative prosperity. Commodity prices plunged, with no significant recovery until the 1950s. A logical peasant response was to return to subsistence production, but that was not be

(5) Whereas all African peoples vehemently resent the militarisation of Africans and the use of African soldiers in a nefarious global game against their brethren as in Algeria, Kenya, South Africa, Camerouns, Ivory Coast, Rhodesia and in the Suez Canal invasion.

(6) Whereas fundamental human rights, freedom of speech, freedom of association, freedom of movement, freedom of worship, freedom to live a full and abundant life, as approved by the All-African People's Conference on 13th December, 1958, are denied to Africans through the activities of imperialists.

(7) Whereas denial of the franchise to Africans on the basis of race or sex has been one of the principal instruments of colonial policy by imperialists and

their agents, thus making it feasible for a few white settlers to lord it over millions of indigenous Africans as in the proposed Central African Federation, Kenya, Union of South Africa, Algeria, Angola, Mozambique and the Camerouns.

(8) Whereas imperialists are now co-ordinating their activities by forming military and economic pacts such as NATO, European Common Market, Free Trade Area, Organisation for European Economic Co-operation, Common Organisation in Sahara for the purpose of strengthening their imperialist activities in Africa and elsewhere.

Source: Lincoln, W. B. (1968). *Documents in world history, 1945–1967* (pp. 200–201). San Francisco: Chandler Publishing Company.

allowed by colonial states dependent on cash crop production for their revenues, and state coercion in African agriculture increased. Colonial taxation had enmeshed African producers in the cash nexus of the global market.

World War II (1939–1945) also had profound implications for Africa. The British mobilized large numbers of African conscripts; many Kenyan and Nigerian soldiers saw action in Burma (defending British India from Japanese assault) while white South African soldiers fought to liberate Ethiopia from the Italians who had occupied the African kingdom in 1935. North Africa was a major theater of war. Most French colonial governors, in Africa as in Southeast Asia, allied themselves with the collaborationist Vichy regime. But the governor of French Equatorial Africa, Félix Éboué (1884–1944), a descendent of slaves from French Guiana, declared his support for the Free French forces, making the city of Brazzaville an important center of French resistance to fascism.

The war was a watershed in African history. Returning soldiers brought greater knowledge of the world back to Africa's towns and villages. Allied wartime propaganda had asked Africans to sacrifice in the interests of "freedom," a term that now fully entered the vocabulary of African politics. Before the war only a tiny elite of Western-educated Africans had imagined the possibility of self-governing or independent African states. Now there was a much wider social constituency for that idea,

especially among young Africans who were anxious to escape the confines of colonialism and play a larger role in the world.

Leaders such as Kwame Nkrumah of Ghana, Léopold Senghor of Senegal, and Jomo Kenyatta of Kenya returned to Africa from sojourns to Europe and the United States to lead new movements of mass nationalism. In doing so, they were following the example of nationalists in India, which had gained full independence from Britain in 1947. Conflict and occasional violence marked the independence struggle in most colonies, but independence was frequently achieved through peaceful negotiation. Such was the case in the Gold Coast. In 1957 Kwame Nkrumah became its prime minister, changed the name of the country to Ghana, and set a precedent for the continent as a whole.

In settler colonies, however, colonialism could not be overthrown without significant violence. In Kenya the settlers refused to compromise with Jomo Kenyatta's Kenya African National Union. The ensuing Mau Mau Revolt (1954–1960) led to thousands of deaths, mostly African, before independence was achieved in 1964. The violence was even greater in Algeria, where independence from France followed a bitter eight-year war (1954–1962) and cost a million lives.

The Cold War (1945–1991) often played a major role in regions where violence accompanied decolonization.

If you are neutral in situations of injustice, you have chosen the side of the oppressor. If an elephant has its foot on the tail of a mouse and you say that you are neutral, the mouse will not appreciate your neutrality. • DESMOND TUTU (B. 1931)

The Congo became a Cold War battlefield as independence led to civil war, with the United States successfully backing an authoritarian, anticommunist dictator named Mobutu Sese Seko. Portugal refused to give up its colonies without a fight, and its NATO-backed government fought a long war with Soviet-supported insurgents before the independence of Angola and Mozambique in 1974. Similarly, Marxist guerrillas fought the white settler regime in Rhodesia, finally securing majority rule in 1980 and renaming their country Zimbabwe.

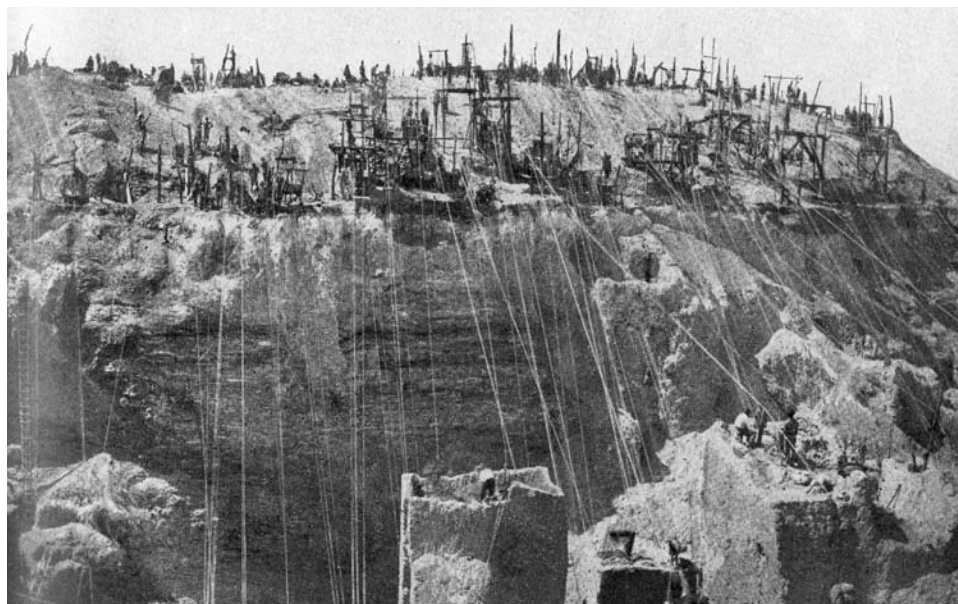
In South Africa, the struggle was even more prolonged. Even after the fight against German fascism had discredited racism as a political ideology, white South African voters supported the creation of an apartheid state after 1948. Under the leadership of Nelson Mandela, the African National Congress used nonviolent civil disobedience to oppose apartheid, but the response was increased repression. In 1964, Mandela and his colleagues were sentenced to life in prison after they turned to sabotage as a means of resistance. In a Cold War context, the United States and Great Britain were reluctant to put too much pressure on the apartheid regime, given the significant Western investment in South Africa's profitable mining and industrial sectors and the strongly anti-

communist stance of its leaders. But major uprisings throughout the late 1970s and 1980s, in which African students played a major role, kept pressure on the regime. In 1994 Nelson Mandela became the first president of a democratic South Africa. The colonial era in African history was finally at an end.

The Legacies of Colonialism

Political geography is perhaps the most obvious legacy of colonialism. With a map created by Europeans for their own purposes, Africans have struggled to create viable nations within the borders bequeathed to them. The problem of creating strong nation-states has been compounded by other political legacies of colonialism. Ethnic politics is one example. As elsewhere in the world, when mass politics developed in Africa there was a tendency for ethnic and/or religious identifications to be heightened. The development of such ethnic identities was often encouraged by colonial powers as part of a divide-and-rule strategy. Since such identities rarely corresponded with national boundaries, ethnic subnationalism became a major challenge to national cohesion in new African states. The legacy of authoritarian rule inherited from colonialism, with weak structures of civil soci-

Mineral wealth was one of the desires of the colonial rulers of Africa. This photo shows a large De Beers diamond mine in South Africa in 1873.





ety to counterbalance state power, has also had unfortunate effects across the continent.

The economic legacies of colonialism have been equally problematic. The inherited transportation infrastructure, geared toward the export of agricultural goods and raw materials, has made it difficult to integrate African economies within and between nations. Even while Africa's manufacturing sector has grown, problems of economic underdevelopment remain. Africans still often produce what they do not consume, and consume what they do not produce, remaining dependent on the vagaries of international commodity prices.

Africans have had difficulty making positive use of the political and economic legacies of colonialism. But the same is not true in cultural and intellectual life, where African encounters with global cultural influences over the past century have been remarkably fruitful. In music and in the visual arts, for example, Africans have absorbed European and other cultural influences without sacrificing a distinctly African aesthetic. Similarly, as Africans have accepted new religions, most notably Christianity and Islam, they have infused them with beliefs and practices rooted in their own cultural traditions. It is in these cultural, intellectual, and spiritual domains that hope resides for the African continent to surmount the challenges remaining from the colonial period.

Kenneth R. Curtis

See also Africa, Postcolonial; Apartheid in South Africa; Pan-Africanism

Further Reading

- Austen, R. (1987). *African economic history: Internal development and external dependency*. London: Heinemann.
- Boahen, A. A. (1989). *African perspectives on colonialism*. Baltimore: Johns Hopkins.
- Boahen, A. A. (Ed.). (1990). Africa under colonial domination, 1880–1935. In *UNESCO general history of africa* (Vol. 7). Berkeley: University of California Press.
- Brown, I. (Ed.). (1989). *The economies of Africa and Asia in the inter-war depression*. London: Routledge.
- Comaroff, J., & Comaroff, J. (1991–1997). *Of revelation and revolution* (Vols. 1–2). Chicago: University of Chicago Press.
- Conklin, A. (1997). *A mission to civilize: The republican idea of empire in France and West Africa, 1895–1930*. Stanford, CA: Stanford University Press.
- Falola, T. (2001). *Nationalism and African intellectuals*. Rochester, NY: University of Rochester Press.
- Fieldhouse, D. K. (1981). *Colonialism 1870–1945: An introduction*. London: Weidenfeld & Nicholson.
- Hochschild, A. (1999). *King Leopold's ghost: A story of greed, terror and heroism in colonial Africa*. Boston: Mariner Books.
- Kerslake, R. T. (1997). *Time and the hour: Nigeria, East Africa, and the Second World War*. New York: Radcliffe Press.
- Loomba, A. (1998). *Colonialism/postcolonialism*. New York: Routledge.
- Mamdani, M. (1996). *Citizen and subject: Contemporary Africa and the legacy of late colonialism*. Princeton, NJ: Princeton University Press.
- Mazrui, A. A., & Wondji, C. (Eds.). (1994). Africa since 1935. In *UNESCO general history of Africa* (Vol. 8). Berkeley: University of California Press.
- Mazrui, A. A. (1986). *The Africans: A triple heritage*. Boston: Little Brown.
- Northrup, D. (2002). *Africa's discovery of Europe*. New York: Oxford University Press.
- Nzegwu, N. (Ed.). (1998). *Issues in contemporary African art*. Birmingham, AL: International Society for the Study of Africa.
- Page, M. E. (1987). *Africa and the First World War*. New York: St Martin's Press.
- Palmer, R., & Parsons, N. (1977). *The roots of rural poverty in Central and Southern Africa*. London: Heinemann.
- Phillips, A. (1989). *The enigma of colonialism: British policy in West Africa*. London: James Currey.
- Rosander, E. E., & Westerlund, D. (Eds.). (1997). *African Islam and Islam in Africa*. Athens: Ohio University Press.
- Shillington, K. (2004). *Encyclopedia of African history*. New York: Fitzroy Dearborn.
- Sundkler, B., & Sneed, C. (2000). *A history of the church in Africa*. Cambridge, UK: Cambridge University Press.
- Zezeza, P. T., & Eyoh, D. (Eds.). (2003). *Encyclopedia of twentieth-century African history*. New York: Routledge.

Africa, Postcolonial

After World War II, Africans and those of African descent met at the Fifth Pan-African Congress in Manchester in the United Kingdom in 1945, where one of their primary aims was to formulate strategies for ending colonialism on the continent. Several independence movements around the continent were sparked or gained a new momentum as a result of the congress's activities. By 1960 several African countries had freed themselves of their colonial masters or were actively engaged in

struggles to achieve that goal. In the following decades the African continent experienced many political, economic, and social challenges as well as moments of glory that have helped determine its current position in world history.

Impact of Colonialism

Colonialism's impact on the African continent was dramatic: Colonialism was autocratic, and it set up artificial boundaries that privileged certain regions (or ethnic groups within those regions). Colonial authorities exploited the territories they controlled for their mineral wealth, and agricultural potential was poorly developed. This colonial legacy was a huge challenge for the new governments in the early postcolonial period.

The fact that colonial powers had not established democratic governments in the lands they controlled predisposed the newly established independent governments to continue noninclusive traditions of governing. During the colonial era police forces had been used to quell disturbances, put down protests, and arrest political agitators; many of these practices continued after independence. The fledgling independent states did not have the means to address major concerns such as better employment opportunities, housing, and developing adequate health care and educational systems. Often, out of political expediency, the new governments catered to privileged classes or ethnic groups that were the equivalent of mini nations within larger states.

The Organization of African Unity (OAU)

At the core of the idea of a united African continent was the Pan-Africanist Kwame Nkrumah (1909–1972), the first leader of an independent Ghana. His vision of a United States of Africa took a step forward with the formation of the Organization of African Unity, whose charter was signed on 25 May 1963 in Addis Ababa, Ethiopia. Among the conditions for membership were political independence and government by majority rule. There were thirty charter members, among them Ghana,

I shall allow no man to belittle my soul by making me hate him. • BOOKER T. WASHINGTON (1856–1915)

Morocco, Algeria, Libya, Nigeria, Liberia, Sierra Leone, Ethiopia, Senegal, and Chad.

The general aims of the OAU were to promote unity and solidarity among African states, to respect and defend member nations' sovereignty and the integrity of their borders, and to promote intercontinental trade. However, the OAU had no real authority over its member states, and the reality was that external forces (notably the United States and the Soviet Union) had significant influence over the various political and economic positions taken by many of the OAU's member states. While the OAU did use its influence to mediate or attempt to resolve various conflicts on the continent (for example, conflict in Mozambique in the mid-1970s, the Somalia-Ethiopian war of 1977, and civil conflicts in Chad in 1980–1981), it was less successful as the unifying force that Nkrumah had envisioned.

Military Governments

Military takeovers of governments have been a consistent feature of postcolonial African life. Between 1960 and 1990 there were more than 130 coup attempts, close to half of which were successful. By the late 1990s African countries collectively were spending more of their national budgets on military expenditures than on education and health systems combined.

Kwame Nkrumah was ousted from power by the military in 1966; the military retained control on again and off again until 1992. Nigeria, Africa's most populous country, was the setting of a violent military overthrow in January 1967 in which the president and several other prominent politicians were assassinated. Subsequent events in that country led to the outbreak of a devastating civil war (1967–1970, also known as the Biafra War). In some cases military leaders assumed power to prevent the total breakdown of the government, and in some cases the political infighting, governmental corruption, and civil unrest the country endured before the takeover were so severe that the population actually welcomed military intervention. This was the case with Nigeria in 1967 when its first coup took place. But although mili-



A contemporary wall painting titled “Mastering Colonial History the Namibian Way” in central Namibia.

tary governments were able to enforce the rule of law, they were no better at addressing issues of poverty, health care, land reform, and employment than the civilian governments they had toppled.

Forging National Unity

Nation building has been a major challenge for modern African nations. Colonial “divide and rule” policies had often privileged one group over another in terms of political power or access to commercial advantages. The period before and after World War II (when nationalist sentiments began to surge) saw the emergence of ethnic (sometimes referred to as “tribal”) associations and unions. In several cases these became the basis of more formal political parties. While the various disparate fac-

tions shared the single goal of independence, once that was achieved ethnic partisanship frequently became a stumbling block to national unity. There are close to a thousand different ethnic groups represented on the African continent, and from childhood a people are made aware of their ethnic identity as keenly (if not more) as they are made aware of their national identity.

Ethnic conflicts in the postcolonial era have been routine. Whether it is Yoruba versus Hausa versus Igbo in Nigeria, Kikuyu versus Luo in Kenya, Shona versus Ndebele in Zimbabwe, Zulu versus Xhosa in South Africa, or Hutu versus Tutsi in Rwanda, these conflicts have continued to haunt many modern states. The 1994 Hutu-Tutsi conflict in Rwanda led to a genocidal massacre in that country. Political leaders have often actively or sub-

Jomo Kenyatta on the Kenya African Union, 1952

During much of the first half of the twentieth century, Jomo Kenyatta worked to free Kenya from British colonial rule, and he became Kenya's first prime minister and president in 1963. In the excerpt below, from a speech he made at the Kenya Africa Union Meeting (KAU) in Nyeri, Kenya, on 26 July 1952, Kenyatta explains why the KAU was far different from the militant Mau Mau group, which was responsible for murders of white settlers.

... I want you to know the purpose of K.A.U. It is the biggest purpose the African has. It involves every African in Kenya and it is their mouthpiece which asks for freedom. K.A.U. is you and you are the K.A.U. If we united now, each and every one of us, and each tribe to another, we will cause the implementation in this country of that which the European calls democracy. True democracy has no colour distinction. It does not choose between black and white. We are here in this tremendous gathering under the K.A.U. flag to find which road leads us from darkness into democracy. In order to find it we Africans must first achieve the right to elect our own representatives. That is surely the first principle of democracy. We are the only race in Kenya which does not elect its own representatives in the Legislature and we are going to set about to rectify this situation. We feel we are dominated by a handful of others who refuse to be just. God said this is our land. Land in which we are to flourish as a people. We are not worried that other races are here with us in our country, but we insist that we are the leaders here, and what we want we insist we get. We want our cattle to get fat on our land so that our children grow up in prosperity; we do not want that far removed to feed others. He who has ears should now hear that K.A.U. claims this land as its own gift from God and I wish those who are black, white or brown at this meeting to know this. K.A.U. speaks in daylight. He who calls us the *Mau Mau* is not truthful. We do not know this thing *Mau Mau*. We want to prosper as a nation, and as a nation we demand equality, that is equal pay for equal work.

Whether it is a chief, headman or labourer he needs in these days increased salary. He needs a salary that compares with a salary of a European who does equal work. We will never get our freedom unless we succeed in this issue. We do not want equal pay for equal work tomorrow—we want it right now. Those who profess to be just must realize that this is the foundation of justice. It has never been known in history that a country prospers without equality. We despise bribery and corruption, those two words that the European repeatedly refers to. Bribery and corruption is prevalent in this country, but I am not surprised. As long as a people are held down, corruption is sure to rise and the only answer to this is a policy of equality. If we work as one, we must succeed.

Our country today is in a bad state for its land is full of fools—and fools in a country delay the independence of its people. K.A.U. seeks to remedy this situation and I tell you now it despises thieving, robbery and murder for these practices ruin our country. I say this because if one man steals, or two men steal, there are people sitting close by lapping up information, who say the whole tribe is bad because a theft has been committed. Those people are wrecking our chances of advancement. They will prevent us getting freedom. If I have my own way, let me tell you I would butcher the criminal, and there are more criminals than one in more senses than one. The policeman must arrest an offender, a man who is purely an offender, but he must not go about picking up people with a small horn of liquor in their hands and march them in procession with his fellow policemen to Government and say he has got a Mau Mau amongst the Kikuyu people. The plain clothes man who hides in the hedges must, I demand, get the truth of our words before he flies to Government to present them with false information. I ask this of them who are in the meeting to take heed of my words and do their work properly and justly. . . .

Source: Lincoln, W. B. (1968). *Documents in world history, 1945–1967* (pp. 196–197). San Francisco: Chandler Publishing Company.

It may be true that the law cannot make a man love me, but it can stop him from lynching me, and I think that's pretty important. • MARTIN LUTHER KING JR. (1929–1968)

tly exploited ethnic rivalries for political gain. Such is typically the case when resources are limited: Political leaders favor one group as a means of maintaining that group's loyalty and support.

Some countries have used creative strategies to combat ethnic polarization. After Nigeria's devastating civil war, it began a policy of mandatory national service for its youth. After completing secondary school in their home territory, the participants were required to spend a year performing some service-related activity (such as tutoring younger students) in another part of the country, ideally where they would be exposed to a different language and cultural tradition.

Zimbabwe adopted an innovative strategy in the early 1980s in its creation of Heroes Acres. These stylized cemeteries were created throughout the country to honor those who had died during the struggle for independence. In thus honoring a deceased combatant or hero, the state sought to minimize the polarization that could be caused by different ethnic funerary practices.

One-Party States

One way in which a number of modern African leaders and countries have attempted to combat the persistent problem of ethnic polarization has been through the establishment of so-called single- or one-party state. The theory is that if there is only one political party, there will be less of a tendency for people to divide along ethnic lines, and more emphasis could be placed on nation building and tackling other social concerns, such as economic development. Proponents of a one-party state suggest that when there is just one party, individual talent has the opportunity to rise through the ranks of the party to achieve leadership position and recognition, regardless of ethnicity. Another argument put forward in support of a one-party state is that democracy as it has been described in the West is foreign to the African continent, which traditionally had chiefs, kingdoms, and top-down rule. Prominent postindependence leaders who have spoken persuasively in favor of this "traditional" form of government include Julius Nyerere (1922–1999) of Tanzania

and Kenneth Kaunda (b. 1924) of Zambia. Many African countries that began as multiparty states have become, either de jure or de facto, single-party states: Today the majority of African states are one-party states.

The advantages that proponents of a one-party state have touted have not materialized, however. Economically, Tanzania under Julius Nyerere performed very poorly because of his adherence to strict socialist ideology. The one-party systems in Malawi, Zaire, and Uganda were very repressive, restrictive, and even brutal at times. In some cases ethnic loyalties continued to be exploited. Furthermore, because one-party states have a tradition of controlling the media, it is difficult for dissenting views to be heard.

After years of political infighting and dramatic instances of violence in Zimbabwe, the two major political parties—the Zimbabwe African People's Union (ZAPU) and the Zimbabwe African National Union (ZANU)—emerged as a united single party ZANU (PF) in 1987, thus making Zimbabwe a de facto single-party state. Others political parties were not outlawed, but the power apparatus clearly fell into the ZANU (PF) sphere of control. It was not until the early twenty-first century that a viable opposition party emerged. The Movement for Democratic Change (MDC) seriously challenged ZANU, which quickly passed laws, instituted restrictive practices, and, according to members of the opposition, engaged in political intimidation to limit its rival's access to the public and chances for success.

One of the more positive recent developments took place in Kenya at the end of 2002. After years of de facto single-party rule, the Kenya Africa National Union was defeated in free and fair national elections by the newly formed National Rainbow Coalition (NARC) with a minimum of disturbances. This portends a new direction for Kenya and possibly for other African countries.

Economic Strategies

Throughout the postcolonial period there have been multiple efforts to expand economic cooperation among African countries as a means of countering outside unfair

Nearly all men can stand adversity, but if you want to test a man's character, give him power. • ABRAHAM LINCOLN (1809–1865)

trade practices. In 1967 the East Africa Community (EAC), which fostered cooperation among Kenya, Tanzania (by 1967 Tanganyika had become Tanzania, which also included Zanzibar), and Uganda, was established, but it fell apart a decade later, when disputes between Kenya and Tanzania broke out and Tanzania invaded Uganda to oust Idi Amin (1924/1925–2003). The Economic Community of West African States (ECOWAS) was established in 1975 to ease trade among its sixteen member states. Similarly, the Southern African Development Coordinating Conference (SADCC) formed to combat South Africa's economic dominance of that region. These agreements have not been without problems, however. In the case of ECOWAS, for example, Nigeria has been able to use its power as the country with the largest economy and population in the region to force its will on the smaller states.

Directions and Challenges for a New Century

In 2004, South Africa celebrated its tenth anniversary as an independent African state. Ten years earlier, after years of political and often violent resistance, the African National Congress (ANC) under the leadership of Nelson Mandela (b. 1918) took control of the government. Although Mandela served only one term in office as South Africa's first president elected by the entire population, he occupied a larger-than-life position throughout the African world.

As Africa's largest and most prosperous economy, South Africa is poised to lead the rest of the continent. Its current president, Thabo Mbeki (b. 1942), has called for an African renaissance, which he envisions as a regeneration of African pride, technology, innovativeness, and accomplishment.

The promise of this African renaissance, however, is in danger of being sidetracked by the HIV/AIDS pandemic, which has the potential to ravage the African continent in the same way the bubonic plague devastated fourteenth-century Europe. How the African continent deals with the pandemic will determine what sort of future awaits the next generation.

The other threat facing the continent is the outbreak of religious violence in various countries. While outbreaks of violence between Christians and Muslims have occurred in Nigeria since the mid-1980s, they have intensified more recently (within the last five years). Efforts to handle these conflicts have been minimum, and the root causes of the disputes have not really been dealt with. In other parts of West Africa there continue to be religious tensions, but they are not nearly so severe as in Nigeria. The World Conference on Religion and Peace (WCRP; founded 1970), a coalition of representatives of the world's great religions, has encouraged Christian and Muslim leaders in the region to work together through the formation of organizations such as the Inter-Religious Council of Sierra Leone (IRCSL; 1997), which in 1999 helped bring about the signing of the Lomé Peace Accord in that nation. There are many African organizations that seek to address the delicate issue of religious intolerance on the continent. One of the primary aims of the Project for Christian-Muslim Relations in Africa (PROCMURA) is the facilitation of constructive engagement between Christians and Muslims. As part of the effort to improve relations, participants have shared gifts and sent greetings and goodwill messages on the occasion of major religious festivals. They have also formed joint committees of Christians and Muslims to address such issues as the implementation of Islamic law in northern Nigeria and to encourage governments to stop making aid and political appointments dependent on one's religious affiliation. Such efforts represent an African solution to an ongoing challenge in the region.

Christopher Brooks

Further Reading

- Ahluwalia, D. P., & Nursey-Bray, P. (Eds.). (1997). *The post-colonial condition: Contemporary politics in Africa*. Commack, NY: Nova Science Publisher, Inc.
- Babu, A. M. (1981). *African socialism or socialist Africa?* London: Zed Books.
- Beissinger, M., & Young, C. (Eds.). (2002). *Postcolonial Africa and post-Soviet Eurasia in comparative perspective*. Washington, DC: Woodrow Wilson Center Press.
- Crowder, M. (Ed.). (1971). *West African resistance: The military response to colonial occupation*. New York: Africana Publishing Corporation.

Religious belief is a fine guide around which a person might organize his own life, but an awful instrument around which to organize someone else's life. • RICHARD D. MOHR

- Davidson, B. (1992). *The black man's burden: Africa and the curse of the nation-state*. New York: Times Books.
- Fage, J. D. (1969). *A history of West Africa: An introductory survey*. Cambridge, UK: Cambridge University Press.
- Fieldhouse, D. K. (1986). *Black Africa, 1945–1980: Economic decolonization and arrested development*. London: Allen and Unwin.
- Griffiths, I. L. (1995). *The African Inheritance*. London: Routledge.
- Werbner, R., & Ranger, T. (Eds.). (1996). *Postcolonial identities in Africa*. London; New Jersey: Zed Books.

African Religions

Africa is home to numerous “traditional” religions as well as various forms of Islam and Christianity and various more recent religious developments. There are certain religious characteristics that can be found in African spirituality that transcend any particular religion. Examining a sampling of traditional religions and Islamic and Christian denominations provides an insight into those overarching African spiritual characteristics.

Secret Societies

Secret societies, common among certain African peoples found mainly in West Africa, especially those among whom age-determined groups are not as common, often have religious functions. Like age grades they not only cross-cut kinship ties, they unite people in different residence areas.

The religious or ritual knowledge of the secret society is not revealed to nonmembers. The fact that a secret is known only to members, and, perhaps, only to members of a certain rank adds to a secret society's mystery. Moreover, membership is limited to people of a given category. Categories can be as broad as all married women or all initiated men. There are categories for fishermen, hunters, craftsmen of all types, and marketwomen, among others.

The Poro and Sande societies (for men and women, respectively) in Liberia have long interested anthropologists because these societies are major forces aiding government and facilitating social change. The Kpelle tribe opens a Sande bush school (which performs an initiation

ceremony) every three or four years. Women of the Sande society are in complete control of the ceremony and school. Members of the initiation class are all girls between nine and fifteen years of age. They learn all they need to know to be Kpelle women from Sande members during the school session, which lasts from six weeks to three months.

During this period, Sande members perform cliterectomy operations (cliterectomies and circumcisions are common rites of passage in Africa), which are part of the transition from girlhood to womanhood. Sande members then perform rituals for those who have completed the bush school, marking their entrance into Kpelle society as women. Men of the Poro society dress in ritual regalia to welcome the women back into society.

A Supreme Deity

Most traditional African religions acknowledge one Supreme Being, though that creator god is often thought to have removed himself from the human sphere after creation, so that more focus is placed on lesser deities. In Sudan, for example, shrines exist in great numbers to lesser spirits but not to the creator god. The Yoruba of Nigeria acknowledge a Supreme Being, Olorun, but it is the host of secondary deities, or *orisha*, that is the focus of Yoruba attention. Mulungu, the Supreme Being of the peoples of the great lakes region of East Africa, is only turned to in prayer after all other prayers have failed. However, numerous African scholars and scholars of Africa dispute the interpretation that the creator god is viewed as remote. These scholars argue that the creator god is not remote, and rather that people can and do approach this god quite frequently. They indicate that there is a parallel with Christianity and its hierarchy of angels and saints.

In Sudanic religions, people are said to consult with the Creator before their birth, telling him what they want to do in life. The Creator gives each person what is needed to accomplish his or her fate. If a person fails, then he or she is said to be struggling against his or her chosen fate. Luck is focused in the head, so a person who has been lucky in life is said to have a good head.

A Creation Myth of the Tiv People of Nigeria

The excerpt below from R. C. Abraham's 1933 study, The Tiv People, describes the theory of creation held by this culture in Central Nigeria.

The Tiv, in common with many of the other Bantu, believe that God whom they call A'ondo was the direct bodily progenitor of their tribe, this belief pointing to the deification of a former hero. With A'ondo is joined another personage Takuruku, about whom beliefs differ; one version holds that Takuruku was the wife of A'ondo and that they were the parents of Tiv and Uke (the foreigners), Tiv in his turn, being the progenitor of Po'or, Chongo and Pusu. The other and more generally held version, is that Takuruku was the younger brother of A'ondo and the first ancestor of Man in the world; he came to live in the world with his wife and for a long time his diet consisted entirely of fish; one day however, A'ondo came down from the sky on a visit to his brother and said "I am going to explain to you a new kind of food," and taking from a bag slung over his shoulder, some maize grains, he offered them to Takuruku who ate them and finding them tasty, thanked A'ondo and asked whether he had any other food of the same kind. A'ondo returned to the sky and brought a maize-cob, and telling Takuruku to break off a branch of the tree *gbaye* (*Prosopis oblonga*), showed him how to fashion

a wooden hoe and taught him farming and the way to plant seed. This part of the story is undoubtedly influenced by the fact that maize was not originally known to the Tiv, for this is indicated by the name by which they call it, i.e., *ikureke*.

A'ondo then returned to the sky, but the crops of Takuruku failed to thrive owing to lack of rain, so A'ondo told him to come to him in the sky and he would advise him what to do. Takuruku, however, replied "No, I shall not come. I am greater than you and it is for you to come to me." A'ondo refused to do this and the crops withered from lack of rain, while A'ondo said "It is your own fault; I told you to come to me, but you refused. Had you done so, your crops would not have died. Still, I am ready to help you again." He then gave Takuruku some more maize seed and later agase millet (*Pennisetum spicatum*), followed by yams, guinea-corn and bulrush-millet. However, Takuruku was no better a position than before, because he still lacked knowledge of rain; rain remained the secret of A'ondo and he still jealously guards the secret, but he sent down rain for Takuruku's crops, on condition that the latter should acknowledge his precedence.

Source: Abraham, R. C. (1933). *The Tiv people* (p. 36). Lagos, Nigeria: Government Printer.

In general, Africans deem that powers come from the Supreme Being. The Dogon of Mali, for instance, believe that the vital force of their Supreme Being, Amma, circulates throughout the universe. They name that vital force *nyama*. Other groups have similar beliefs. These forces control the weather and are associated with the forces of nature, directly or through the high god's servants.

Other Deities

There are earth goddess cults in a number of societies. The Ibo of the lower Niger river area have the goddess Ala, and the goddess Asase Ya has her devotees among the Ashante of Ghana. The presence of a deity linked to a certain phenomenon or natural feature reflects the importance of that phenomenon or natural feature in daily life; hence the fact that the Yoruba worship Ogun,

the god of iron, reflects the people's sense, from the days when iron first began to be used, of its importance.

Storm gods are in some way related to the Supreme Being. Storm gods generally command their own priests, temples, and ritual ceremonies. The Yoruba and Ibo have a full storm pantheon of gods of storm, lightning, and thunderbolt. Shango is the Yoruba lightning and thunder god; he is worshipped along with his wives, who are river gods, and the rainbow and thunderclap, which are his servants.

Islam in Africa

Islam first came to the savanna areas of Africa through trade and peaceful teachings in the eighth through tenth centuries. The benefits of centralized government under Islamic law were obvious to various chiefs. Under Islamic



law rulers were able to unite tribal elements into a coherent whole. The kingdoms of Wagadu (Ghana), Mali, Songhai, Kanem, and Bornu and the Hausa emirates were all centralized states that adopted Islam to their advantage.

However, the introduction of Islamic government and law also provided an excuse for religiously sanctioned rebellion against rulers who were not living up to the strict tenets of Islam, according to various religious military rulers. In the 1800s, militant Muslims objected to the halfhearted Islamic faith of their rulers and led holy wars against those whom they considered lax in the faith.

These nineteenth-century jihads were common among the Fulani peoples. They upset the balance that had prevailed since around the thirteenth century between local rulers, who adhered to Islam, and their subjects, who continued to practice traditional religions. Although the Fulani tend to be pastoralists, there were a number of settled Fulani who had intermarried with Hausa or other settled peoples. One result of these religious wars was that Fulani rulers replaced local rulers in the areas where the rebellions took place.

Christianity in Africa

Christianity reached Africa in the first centuries CE, before it entered Europe. The Coptic Church (in Egypt), for example, go back to the first century of Christianity and still exists today. It, like the Ethiopian Orthodox Church, is a Monophysite church; that is, it teaches that Christ had a single nature rather than two distinct (human and divine) natures. The Ethiopian Orthodox Church has a large hierarchy of saints and angels, many monasteries and convents, and a strong worship of Mary, Gabriel, Michael, and Ethiopia's patron, St. George. There are many African saints, including Tekle Haimanot and Gabra Manfas Keddus. There is also belief in demons and other evil spirits, as well as in witchcraft and possession.

Possession Cults

Possession cults are one feature of traditional African religions that both African Christians and Muslims partici-

pate in, although often undercover. Although possession cults can be found in many regions, we will focus on the situation among the Hausa. In a 1975 study, the anthropologist Ralph Faulkingham notes that the Muslim and "pagan" Hausa in the southern Niger village he studied believed in the same spirits. Both believed in the same origin myth for these spirits as well. According to the myth, Allah called Adama ("the woman") and Adamu ("the man") to him and bade them to bring all their children. They hid some of their children. When Allah asked them where those children were, they denied that any were missing, whereupon Allah told them that the hidden children would belong to the spirit world. These spirits may, on occasion, take possession of those living in the everyday world.

Indigenous theology linked dead ancestors to the spirits of place in a union that protected claims and relationships to the land. Spirits of place included trees, rock outcroppings, a river, snakes, and other animals and objects. Rituals and prayers directed toward the spirits of family and place reinforced communal norms and the authority of the elders in defending ancient beliefs and practices. In return for these prayers and rituals, the spirits offered protection from misfortune, adjudication, and divination through seers or shamans, who worked with the spirits to ensure good and counteract evil. The Hausa incorporate those beliefs into their Islamic beliefs.

The majority of Muslim Hausa who participate in the spirit possession cult, called the Bori cult, are women and members of the lower classes; as one rises in social standing, one's practice of Islam tends to become more strict and more orthodox. The Bori rituals among the Hausa appear to be rituals of inversion; that is, traditional societal rules are turned on their heads. People who are possessed may behave in ways that would not be accepted in other circumstances. The Bori cult is widely understood as being a refuge from the strongly patriarchal ideal of Hausa Islam. Thus both women and effeminate males find some respite there. Indeed, the Bori cult provides a niche open to marginal people of all kinds, not simply women or homosexuals. Butchers, night soil workers, musicians, and poor farmers are welcome there.

Mentally disturbed people of all classes similarly seek refuge among the Bori devotees.

African Religions Today

The peoples of Africa have been adept at accepting new religious systems while preserving essential features of traditional beliefs, and that approach to religion continues today, when New Age and evangelical Christian denominations have become popular. An African base adapts new ideas and fits them to a basic pattern of kinship, personal spirits, ancestors, and age grades, seeking to fit all of these into personal networks of relationships.

Frank A. Salamone

See also African-American and Caribbean Religions

Further Reading

- Anderson, D. M., & Johnson, D. H. (Eds.). (1995). *Revealing prophets: Prophecy in eastern African history*. London: Ohio University Press.
- Beidelman, T. O. (1982). *Colonial evangelism: A socio-historical study of an east African mission at the grassroots*. Bloomington: Indiana University Press.
- Besmer, F. E. (1983). *Horses, musicians & gods: The Hausa cult of possession-trance*. Westport, CT: Greenwood Press.
- Chidester, D., & Petty, R. (1997). *African traditional religion in South Africa: An annotated bibliography*. Westport, CT: Greenwood Press.
- Clarke, P. B. (Ed.). (1998). *New trends and developments in African religions*. Westport, CT: Greenwood Press.
- Creevey, L., & Callaway, B. (1994). *The heritage of Islam: Women, religion, and politics in West Africa*. Boulder, CO: Lynne Rienner.
- Echerd, N. (1991). Gender relationships and religion: Women in the Hausa Bori in Ader, Niger. In C. Coles & B. Mack (Eds.), *Hausa women in the twentieth century* (pp. 207–220). Madison: University of Wisconsin Press.
- Evans-Pritchard, E. E. (1956). *Nuer religion*. New York: Oxford University Press.
- Faulkingham, R. N. (1975). *The sprits and their cousins: Some aspects of belief, ritual, and social organization in a rural Hausa village in Niger* (Research Report No. 15). Amherst, MA: University of Massachusetts, Department of Anthropology.
- Fortes, M. (1995). *Oedipus and Job in West African religion*. New York: Cambridge University Press.
- Greenberg, J. (1947). *The influence of Islam on a Sudanese religion*. New York: J. J. Augustin Publisher.
- Karp, I., & Bird, C. S. (Eds.). (1980). *Explorations in African systems of thought*. Bloomington: Indiana University Press.
- Makinde, M. A. (1988). *African philosophy, culture, and traditional medicine*. Athens: Ohio University Center for International Studies.
- Olupona, J. K. (Ed.). (1991). *African traditional religions in contemporary society*. St. Paul, MN: Paragon House.
- Oppong, C. (Ed.). (1983). *Male and female in West Africa*. London: Allen & Unwin.
- Parrinder, G. (1954). *African traditional religion*. London: Hutchinson's University Library.
- Pittin, R. (1979). *Marriage and alternative strategies: Career patterns of Hausa women in Katsina City*. Unpublished doctoral dissertation, School of Oriental and African Studies, University of London.
- Turner, E., Blodgett, W., Kahona, S., & Benwa, F. (1992). *Experiencing ritual: A new interpretation of African healing*. Philadelphia: University of Pennsylvania Press.
- Walby, C. (1995). The African sacrificial kingship ritual and Johnson's "Middle Passage." *African American Review*, 29(4), 657–669.

African States, Ancient

See Aksum; Benin; Congo; Egypt, Ancient; Hausa States; Kanem-Bornu; Mali; Meroe; Nubians; Sokoto Caliphate; Songhay; Wagadu Empire; Zimbabwe, Great

African Union

Originally founded in 1963, the Organization of African Unity (OAU) was reconstituted as the African Union after member states ratified the Constitutive Act adopted in July 2000. While the member states professed pleasure with the performance of the OAU, they also said they wished to reform the relationship of the member states in an effort to better realize the goals of African unity on which the OAU was originally premised.

The Pan-African Dream

By the early nineteenth century, many Africans who had been educated in Europe began to speak and write of an African identity that transcended linguistic and ethnic groupings as well as colonial identifications. It is not clear when the term *pan-Africanism* was first applied in this context, and most people who used the word appeared to recognize it as little more than a dream. The idea of continental unity was certainly on the minds of delegates from the Caribbean, North America, Europe, and Africa

African nationalism is meaningless, dangerous, anachronistic, if it is not, at the same time, pan-Africanism. • JULIUS K. NYERERE (1922–1999)

who met in London for the First Pan-African Congress in 1900. The congress called for an end to colonial rule in Africa, citing its negative effects on Africans and proclaiming the need for all Africans—including those of African descent outside the continent—to come together in support of a greater African social and political entity.

This congress was followed by numerous expressions of similar ideas, including important statements by the Gold Coast political activist Charles Casley-Hayford, as well as various organizational expressions, perhaps most notably the Universal Negro Improvement Association founded by the Jamaican activist Marcus Garvey in 1914. Several international conferences promoting African solidarity followed, the first in 1919, coinciding with the Versailles Peace Conference at the end of World War I, followed by a series of others throughout the 1920s. By the 1930s, colonial governments in Africa grew deeply suspicious of activities claiming pan-African connections, but the dynamics stimulating ideas of African unity grew more forceful with the onset of World War II.

African Independence and Continental Unity

Following World War II, many politically aware Africans believed independence from colonial rule was certain, if not imminent. Confirmation of this idea came first in northern Africa, with Libya's release from Italian control in 1951; but perhaps the most significant development was the creation of the new nation of Ghana, from the former British West African colony of Gold Coast, in 1957. Some African leaders, especially Ghana's first president, Kwame Nkrumah, saw this as a signal portending the creation of a unified, independent continent:

A union of African states will project more effectively the African personality. It will command respect from a world that has regard only for size and influence. . . . It will emerge not just as another world bloc to flaunt its wealth and strength, but as a Great Power whose greatness is indestructible because it is built not on fear, envy, and suspicion, nor won at the expense of others, but founded on hope, trust, friendship and directed to the good of all mankind (Nkrumah 1961, xii).

Nkrumah actively campaigned for this principle of African unity, believing it would be the best way to encourage an end to all vestiges of colonialism on the continent. At a May 1963 meeting of African heads of state in Addis Ababa, Ethiopia, Nkrumah presented a formal plan to have all African nations join in the creation of such a union. By the end of the meeting, the more than thirty nations represented agreed to the creation of the Organization of African Unity.

Organization of African Unity

The OAU was in one measure a victory for the pan-African movement that had preceded it, especially in the arena of international efforts to remove all traces of colonialism in Africa. A nine-nation Liberation Committee worked to promote independence for Africans continuing to live under colonialism and also to bring about majority rule for Africans living in South Africa. These efforts were a substantial part of the successful international efforts that eventually led to the end of apartheid and to a new South African government in the 1990s.

But the price of this pan-African victory was a significant limitation of the scope and power of the OAU as an effective international organization. The core of this dilemma was in the first principle enunciated in its charter—"the sovereign equality of all member states"—which included a commitment to "non-interference in the internal affairs" of any member state (African Union n.d.a). In practice, this limited what the OAU might achieve in promoting many of its other goals, including the protection of the rights of Africans and the resolution of a number of destructive civil wars on the continent.

One expression of the frustration concerning these limitations was the complaint often voiced by Julius Nyerere, president of Tanzania, that the OAU was merely a sort of trade union for African heads of state that allowed each of them a forum of international expression without any questions about their own sometimes destructive policies. Thus, rather than promoting any real unity, the OAU was seen at times to reinforce the unnatural divisions of the continent that had in fact been the legacy of colonial

conquest and administration. Only terribly destructive conflicts in the 1990s in the Congo, Ethiopia, Somalia, and still later in Sierra Leone and Liberia—the last two of which precipitated intervention by a group of West African states—brought the OAU policies of noninterference seriously into question.

A New Organization

African heads of state meeting in 1999 issued a declaration calling for a reconstituted continental organization modeled loosely on the European Union. One of the keys to the new African Union (AU) was a new principle written into its Constitutive Act, adopted in July 2000, which asserted “the right of the Union to intervene in a Member State pursuant to a decision of the Assembly in respect of grave circumstances, namely: war crimes, genocide and crimes against humanity” while also reaffirming the “sovereign equality and interdependence” of all the member states (African Union n.d.b). The AU actually came into existence the following year and was ceremonially launched at a summit in Durban, South Africa, in July 2002.

The new organization has promised to focus more on economic matters, even moving toward an eventual common currency. These efforts have been widely applauded internationally, with significant commitments from the United States and the European Union for a New Partnership for African Development created by the AU member states. In addition, plans are under way for the creation of an African Peacekeeping Force and perhaps even a Pan-African Parliament, in hopes of making significant contributions to security and political independence for all of Africa’s peoples, as originally envisioned by the first pan-African theorists.

Melvin E. Page

Further Reading

African Union. (n.d.a). *Constitutive Act of the African Union*. Retrieved on August 9, 2004, from http://www.africa-union.org/About_AU/Ab_Constitutive_Act.htm

African Union. (n.d.b) *OAU charter, Addis Ababa, 25 May 1963*. Retrieved on August 9, 2004, from <http://www.africa-union.org/>

- Official_documents/Treaties_%20Conventions_%20Protocols/OAU_Charter_1963.pdf
- El-Ayouty, Y. (1994). *The Organization of African Unity after thirty years*. Westport, CT: Praeger.
- Esedebe, P. O. (1982). *Pan-Africanism: The idea and movement, 1776–1963*. Washington, DC: Howard University Press.
- Krafona, K., (Ed.). (1988). *Organization of African Unity: 25 years on*. London: Afroworld Publishing.
- Genge, M., Francis, K., & Stephen, R. (2000). *African Union and a pan-African parliament: Working papers*. Pretoria: Africa Institute of South Africa.
- Gilbert, E. & Reynolds, J. T. (2004). *Africa in world history*. Upper Saddle River, NJ: Pearson Education.
- Iiffe, J. (1995). *Africans: The history of a continent*. Cambridge, UK: Cambridge University Press.
- Legum, C. (1976). *Pan-Africanism*. Westport, CT: Greenwood Press.
- Martin, T. (1983). *The pan-African connection*. Dover, MA: Majority Press.
- Naldi, G. J. (1999). *The Organization of African Unity: An analysis of its role* (2nd ed.). New York: Mansell.
- Nkrumah, K. (1961). *I speak of freedom: A statement of African ideology*. New York: Praeger.

African-American and Caribbean Religions

African-American and Caribbean religions are the products of one of the greatest forced migrations in human history. Historians estimate that between 1650 and 1900 more than 28 million Africans were taken from Central and West Africa as slaves. At least 12 million of these Africans crossed the Atlantic Ocean to be sold in the Caribbean, South America, and North America. While Africans from many parts of Africa were taken into slavery, West African groups were disproportionately represented. Beginning in the early sixteenth century and continuing, officially, until 1845 in Brazil, 1862 in the United States, and 1865 in Cuba, more than 11 million black Africans—Yoruba, Kongo, and other West Africans—were brought to the Americas to work sugar, tobacco, coffee, rice, and cotton plantations.

The African slave trade transformed economies around the world. In Africa, it stimulated the growth of powerful

Like an unchecked cancer, hate corrodes the personality and eats away its vital unity. Hate destroys a man's sense of values and his objectivity. It causes him to describe the beautiful as ugly and the ugly as beautiful, and to confuse the true with the false and the false with the true. • MARTIN LUTHER KING JR. (1929–1968)

African kingdoms, while in the Islamic world, the African slave trade expanded commerce in the Indian Ocean and the Persian Gulf. In the Americas, it was a key component in the success of plantations established by Europeans. In addition, wealth generated by slavery transformed European economies dramatically, and the African slave trade also transformed African religions and fostered the spread of these religions around the world.

African Religions in the New World

In the Americas, the institution of slavery persisted much longer in some places than others. With the exception of African slaves in Haiti—who initiated a revolution in 1791 and in 1804 established the first black republic in the Americas—Africans became emancipated in the Americas in the following order: Jamaica and Trinidad in 1838; the United States in 1863; Puerto Rico in 1873; Cuba in 1886; and Brazil in 1888. These dates are highly significant. For example, the ethnologist Pierre Verger (1968) contends that the “purest” forms of African religion are to be found in northeastern Brazil primarily because the slave trade to Brazil continued illegally into the twentieth century.

Of the Africans taken to the Americas as slaves, 99 percent came from an area stretching from modern-day Senegal and Mali in the north to Zaire and Angola in the south. This corridor encompasses a number of ethnic groups belonging to the Niger-Kongo language family. A common language base and common cultural traditions facilitated the movement and exchange of people, goods, and ideas along this corridor.

These ethnic groups also shared similar concepts concerning deities, the universe, the social order, and the place of humans within that order. Unifying themes of African systems of belief and worship include the following: the idea that there is one god who created and controls the universe; a focus on blood sacrifices; and belief in the forces of nature, ancestral spirits, divination, the magical and medicinal powers of herbs, the existence of an afterlife, and the ability of humans to communicate with deities through trance-possession states.

Descendants of Kongo and Yoruba peoples account for about 17 percent of the African population in Jamaica, while the Akan and Kalabari account for, respectively, 25 percent and 30 percent of the Jamaican population. It is estimated that on Cuba and Hispaniola (the island that is home to Haiti and the Dominican Republic) Kongo ethnic groups constitute 40 percent of the African population, while the Yoruba and other related groups shipped from the Bight of Benin make up, respectively, 15 percent and 40 percent of the African populations of Haiti and Cuba. Among the descendants of slaves in the United States, it is estimated that one in four African Americans is of Kongo descent and that one in seven African Americans is of Yoruba descent. It should be noted that few slaves came to the United States directly from Africa. Most had worked plantations elsewhere before being sold in the United States.

These percentages are important for understanding African religions in the New World. Whenever a large number of slaves from a particular place in Africa were sold to a single New World location, they were better able to preserve selected aspects of their religions. Such religious retentions were never exact replicas of African religious practices. They represented a syncretism or blending. One reason for this is that African tribal religions were revealed over time. Only elders possessed extensive religious knowledge. During the early years of slavery, elders were seldom enslaved because older captives rarely survived the rigorous passage to the New World. Most first-generation slaves were under twenty years of age, and few were over thirty. Their knowledge of religious ritual was limited to what they had personally seen and/or experienced. On the other hand, later in the slave trade there were African religious specialists (like Robert Antoine, the nineteenth-century founder of the first Rada compound in Trinidad) who voluntarily migrated to the Caribbean specifically to establish African religious centers in the New World.

The relationship between African religions as practiced in Africa and these same religions in the New World is replete with examples of what Pierre Verger (1968, 31) has termed “flux and reflux.” Building on a lifetime of

Religious and other articles on display at an Afro-Caribbean celebration.



fieldwork and archival research, Verger documented extensive and continuous contact between religious specialists in Africa and religious organizations in the New World. He painstakingly demonstrated that the slave trade was not only “of” Africans (i.e., as objects of the trade itself), but “by” Africans as well, in the sense that Africans and African-Americans were not only laborers but also producers and traders in the plantation system, and thus played an active role—not just a passive one—in the ongoing drama of slavery. But Verger also notes that such “flux and reflux” was rare during the early days of slavery, and most sixteenth- and seventeenth-century slaves were forced to improvise from a limited knowledge of African religious traditions.

On both sides of the Atlantic the meeting of religions among Africans and people of African descent involved more than Christianity and the traditional religions of Africa. It also involved Islam. Working its way from the Sahara long before Christianity began to touch the coast of West Africa, Islam—like Christianity—interacted in complex ways with the traditional religions of Africa. Brought to the Americas by enslaved African Muslims, Islam struggled to survive in an inhospitable, Christian-dominated environment.

African and African-American religions have always been at the center of debates concerning the retention of African cultural traits in the New World. Some prominent scholars, most notably sociologist E. Franklin Frazier (1964), have suggested that New World slavery was so disruptive that few African traits were able to survive. Other scholars, most notably anthropologist Melville J. Herskovits (1941), have argued effectively for the survival of African traits in New World societies. Herskovits’s view has predominated, but the issue remains complex (see Mintz and Price 1992).

The quest for African cultural traits in the New World continues, but with new and refined sensibilities. The question is no longer whether, but how much? As Stuart Hall (1990, 228)—commenting on the *presence africaine* in his native Jamaica—noted,

Africa was, in fact, present everywhere, in the everyday life and customs of the slave quarters, in the language and patois of the plantations, in names and words; often disconnected from their taxonomies, in the secret syntactical structure through which other languages were spoken, in the stories and tales told to children, in religious practices and belief in the spiritual life, the arts, crafts, music and rhythms of slave and post-emancipation society. . . . Africa remained

But if you are in danger, then [say your prayers] on foot or on horseback; and when you are secure, then remember Allah, as He has taught you what you did not know. • QURAN

and remains the unspoken, unspeakable “presence” in Caribbean culture. It is “hiding” behind every verbal inflection, every narrative twist of Caribbean cultural life.

African-American religious institutions in the United States and the Caribbean provide valuable insight into the inner workings of African-American and Caribbean societies and cultures. Moreover, it is appropriate for social scientists to devote their attention to religion because—as C. Eric Lincoln and Lawrence Mamiya so effectively argued (1990, xi)—“religion, seriously considered, is perhaps the best prism to cultural understanding, not as a comparative index, but as a refractive element through which one social cosmos may look meaningfully at another and adjust its presuppositions accordingly.”

Two erroneous assumptions have informed past studies of African and African-American religions. The first is that the black experience of religion simply replicates white religious experience; the second is that it is totally dissimilar to it. Neither assumption is true because neither takes into account the complex interactions between African-based religions and other world religions. Correctly viewed, African-American religious experience cannot be separated from North American religion. It is of one fabric. African religious experience is part and parcel of North American religious experience just as Christianity and Islam are now part and parcel of religious experience on the continent of Africa. Nevertheless, exact genealogies of African and African-American religions are difficult to discern.

African Religions in the Caribbean

The best-documented religions—such as Haitian Vodun, Rastafarianism, Cuban Santería, and the Spiritual Baptists in Trinidad—serve as prime examples of creativity and change in this dynamic region, which has become a fertile ground for the development of new religious admixtures and syncretism. Almost everyone in the Caribbean is from someplace else, and Caribbean religions have been greatly affected by the presence of Euro-

peans, Africans, and—to a lesser extent—by Asian people as well. A majority of these religions have either an African or Christian base, but Caribbean peoples have modified selected aspects of these traditions, added to them, and made them their own. While much attention has been given to African influences, one cannot completely understand religious developments in the region solely in terms of an African past. The African past is a piece—albeit a large piece—of a more complex whole. Syncretism of Hinduism and Christianity abounds, and one can never underestimate the potential impact of Islam.

Rastafarianism is perhaps the most widely known of Caribbean religions. It is difficult to estimate the exact number of Rastafarians, but the religion’s influence vastly exceeds its numbers in Jamaica, elsewhere in the Caribbean, in Europe, Latin America, and the United States. The movement traces its history to a number of indigenous preacher-leaders in the 1930s, most notably Leonard Howell, Joseph Hibbert, Archibald Dunkley, Paul Earlington, Vernal Davis, Ferdinand Ricketts, and Robert Hinds. The influence of Marcus Garvey is also apparent. Each of these leaders—working in isolation from the others—came to the conclusion that Haile Selassie, then enthroned as Ethiopian emperor, was the “Lion of Judah” who would lead all peoples of African heritage back to the promised land of Africa. In the Amharic (Ethiopian language), Ras Tafari means “head ruler” or “emperor.” It is one of the many formal titles belonging to Haile Selassie.

While Rastafarianism is by no means a homogeneous movement, Rastafarians share seven basic tenets: (1) black people were exiled to the West Indies because of their moral transgressions; (2) the wicked white man is inferior to black people; (3) the Caribbean situation is hopeless; (4) Ethiopia is heaven; (5) Haile Selassie is the living God; (6) the emperor of Ethiopia will arrange for all expatriated persons of African descent to return to their true homeland; and (7) black people will get revenge by compelling white people to serve them. Among contemporary Rastafarians different subgroups

Discrimination and African-American Churches

Many African-American churches began because African-Americans sought a place of worship that was free of discrimination and where they could be full participants. In the following passage, Richard Allen recounts the events that led him to found the African Methodist Episcopal Church.

A number of us usually attended St. George's church in Fourth street; and when the colored people began to get numerous in attending the church, they moved us from the seats we usually sat on, and placed us around the wall, and on Sabbath morning we went to church and the sexton stood at the door, and told us to go in the gallery. He told us to go, and we would see where to sit. We expected to take the seats over the ones we formerly occupied below, not knowing any better. . . . Just as we got to the seats, the elder said, "Let us pray." We had not been long upon our knees before I heard considerable scuffling and low talking. I raised my head up and saw one of the trustees, H-M-, having hold of the Rev. Absalom Jones, pulling him up off of his knees, and saying, "You must get up—you must not kneel here." Mr. Jones replied, "Wait until prayer is over." Mr. H-M- said, "No, you must get up now, or I will call for aid and

force you away." Mr. Jones said, "Wait until prayer is over, and I will get up and trouble you no more." With that he beckoned to one of the other trustees, Mr. L-S-, to come to his assistance. He came, and went to William White to pull him up. By this time prayer was over, and we went out of the church in a body, and they were no more plagued with us in the church. This raised a great excitement and inquiry among the citizens, in so much that I believe they were ashamed of their conduct.

But my dear Lord was with us, and we were filled with fresh vigor to get a house erected to worship God in. . . . We got subscription papers out to raise money to build the house of the Lord. . . . But the elder of the Methodist Church still pursued us. Mr. John McClaskey called upon us and told us if we did not erase our names from the subscription paper, and give up the paper, we would be publicly turned out of meeting. . . . We told him we had no place of worship; and we did not mean to go to St. George's church any more, as we were so scandalously treated in the presence of all the congregation present; "and if you deny us your name, you cannot seal up the scriptures from us, and deny us a name in heaven. We believe heaven is free for all who worship in

stress different elements of the original creed; for example, the alleged death of Haile Selassie (a large number of Rastafarians believe that Haile Selassie is still alive) has raised significant questions regarding Selassie's place in the movement.

Cuban Santeria combines European and African beliefs and practices. But unlike Vodun, the religion is inspired mainly by one African tradition—that of the Yoruba. In Santeria, the Yoruba influence is marked in music, chants, and foodstuffs, and by sacrifice. During major ceremonies, blood—the food of the deities—flows onto sacred stones belonging to the cult leader. These stones are believed to be the objects through which the gods are fed and in which their power resides. A significant religious development in North America has been the large-scale transfer of Cuban Santeria to urban cen-

ters, notably New York, Miami, Los Angeles, and Toronto. It is estimated that there are currently more than 100,000 Santeria devotees in New York City alone.

The Spiritual Baptists are an international religious movement with congregations in Saint Vincent (where some Baptists claim the faith originated), Trinidad and Tobago, Grenada, Guyana, Venezuela, Toronto, Los Angeles, and New York City. Membership is predominantly black, but in recent years congregations in Trinidad have attracted membership among wealthy East Indians and Chinese. A central ritual in the Spiritual Baptist faith is known as the mourning rite. This is an elaborate ceremony involving fasting, lying on a dirt floor, and other deprivations. A major component of the mourning rite is discovering one's true rank within the church hierarchy.

A critical issue in the study of Caribbean religions is the

spirit and truth.” And he said, “So you are determined to go on.” We told him, “Yes, God being our helper.” He then replied, “We will disown you all from the Methodist connection.” We believed if we put our trust in the Lord, he would stand by us.

Notwithstanding we had been so violently persecuted by the elder, we were in favor of being attached to the Methodist connection; for I was confident that there was no religious sect or denomination would suit the capacity of the colored people as well as the Methodist; for the plain and simple gospel suits best for any people; for the unlearned can understand, and the learned are sure to understand; and the reason that the Methodist is so successful in the awakening and conversion of the colored people, the plain doctrine and having a good discipline. But in many cases the preachers would act to please their own fancy, without discipline, till some of them became such tyrants, and more especially to the colored people. They would turn them out of society, giving them no trial, for the smallest offense, perhaps only hearsay. They would frequently, in meeting the class, impeach some of the members of whom they had heard an ill report, and turn them out, . . . notwithstanding in the first rise

and progress in Delaware state, and elsewhere, the colored people were their greatest support; for there were but few of us free; but the slaves would toil in their little patches many a night until midnight to raise their little truck and sell to get something to support them more than what their masters gave them, and we used often to divide our little support among the white preachers of the Gospel . . .

I feel thankful that ever I heard a Methodist preach. We are beholden to the Methodists, under God, for the light of the Gospel we enjoy; for all other denominations preached so high-flown that we were not able to comprehend their doctrine. . . . It is to be awfully feared that the simplicity of the Gospel that was among them fifty years ago, and that they conform more to the world and the fashions thereof, they would fare very little better than the people of the world. The discipline is altered considerably from what it was. We would ask for the good old way, and desire to walk therein.

Source: Allen, R. (1883). *The life experience and gospel labors of the Rt. Rev. Richard Allen*. Philadelphia: Martin and Boston.

selection of a unit of analysis. Because syncretism plays such a prominent role in the development of religions in the region, it is often difficult to separate indigenous and foreign elements. Since there has been so much outreach, it is often difficult to discover the “true” origin of any single religious group. Because most of the religions considered here lack a denominational chain of command, one cannot make statements about them as one might about the Roman Catholic Church or Presbyterianism. The most accurate assessments refer to individual congregations and their leaders. To examine movements such as Rastafarianism, Santeria, Vodun, and the Spiritual Baptists as if they were unified denominations on the European and North American model is to present an overly coherent picture of an incredibly fragmented and volatile religious situation.

African Religions in the United States

Scholarly studies on African-American religion in the United States are often traced to W. E. B. Du Bois’s classic *The Negro Church* (1903), “which constituted the first major book-length study of African-American religion in the United States. Employing a wide range of research strategies (historical, survey, interview, and participant-observation) Du Bois explored multiple aspects of African-American religious life including church finance, denominational structures, and beliefs. Du Bois characterized the Black Church as the first distinctly African-American social institution” (Zuckermann 2000, 109). Subsequent studies of the Black Church were much more limited in scope. As noted, later scholars confined their attentions to the retention of African cultural traits in the

Matthew 5:43–44—Ye have heard that it hath been said, Thou shalt love thy neighbour, and hate thine enemy./But I say unto you, Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you. • BIBLE

New World, and scholars debated the extent to which African-American religion draws from African religion in its diverse forms. Few slaves came directly to the United States from Africa, and the presence or absence of so-called Africanisms is more difficult to discern in American religions than in those of the Caribbean. Nevertheless, bits and pieces of African religious concepts and rituals are present in North America—but in greatly modified forms. These concepts and rituals include the call-and-response pattern in preaching, ancestor worship, initiation rites, spirit possession, healing and funeral rituals, magical rituals for obtaining spiritual power, and ecstatic spirit possession accompanied by rhythmic dancing, drumming, and singing.

Prior to the American Revolution, few American slaves were exposed to Christianity. Initially, planters did not promote the conversion of their slaves to Christianity because they feared that it might give slaves ideas about equality and freedom that were incompatible with slavery. Over time, however, slave owners became convinced that a highly selective interpretation of the Gospel message could be used to foster docility in their slaves. During the First Great Awakening (1720–1740), some free blacks and slaves joined Methodist, Baptist, and Presbyterian congregations. The Second Great Awakening (1790–1815), with its numerous camp meetings, attracted more slaves and free blacks to evangelical forms of Protestantism. In the eighteenth century, Methodists emerged as leaders in developing effective religious instruction among the slaves. Following its creation in 1845, the Southern Baptist Convention also undertook aggressive missionary work among slaves. Religion scholar Albert Raboteau (1978) has suggested that the Baptists were especially successful because baptism by immersion resembled West African initiation rites.

Throughout the United States, slaves worshiped in both mixed and segregated congregations. Masters often took house slaves with them to religious services at their own (predominantly white) churches, where blacks were required to sit in separate galleries. In addition to attending church services with their masters, slaves held secret religious meetings in their own quarters, in “praise houses,” or away from the plantation in so-called hush arbors.

During the time of slavery, African-Americans in the United States never experienced complete religious freedom, but a number of independent African-American congregations and religious associations arose. Two early Baptist churches, the Joy Street Baptist Church in Boston (which was established in 1805) and the Abyssinian Baptist Church in New York City (which was established in 1808), were founded in response to discrimination in racially mixed congregations. Black Baptist congregations in the Midwest formed separate regional associations in the 1850s, and the first Baptist association, the National Baptist Convention, U.S.A., was formed in 1895. Black Methodists also established independent congregations and associations during the antebellum period. A group of blacks belonging to the Free African Society, a mutual aid society within St. George’s Methodist Episcopal Church in Philadelphia, severed ties with its parent body in 1787 in response to what some black members saw as discriminatory practices. A majority of the dissidents united to form St. Thomas’s African Episcopal Church in 1794, under the leadership of Absalom Jones. Richard Allen led a minority contingent to establish the Bethel African Methodist Episcopal Church. The Bethel Church became the founding congregation of the African Methodist Episcopal (AME) Church—the single largest black Methodist denomination. St. John’s Street Church in New York City, with its racially mixed congregation, served as an organizational nexus for what became the second major black Methodist denomination, the African Methodist Episcopal Zion (AMEZ) Church.

African-American religions became more diverse in the early twentieth century as blacks migrated from the rural South to northern cities. By this time, two National Baptist associations and three black Methodist denominations were already well established as the mainstream churches in black urban communities. Often these denominations cut across class lines. Conversely, black congregations affiliated with white-controlled Episcopalian, Presbyterian, and Congregational churches catered primarily to African-American elites. Although mainstream churches attempted to address the social needs of recent migrants, their middle-class orientations often made migrants feel ill at ease. As a consequence,

You have two qualities which God, the Most Exalted, likes and loves. One is mildness and the other is toleration. • MUHAMMAD (570–632)

many migrants established and joined storefront churches. In addition, recent migrants became attracted to a wide array of Holiness-Pentecostal Churches, Sanctified Churches, and Spiritual Churches, as well as various Islamic and Jewish sects. Other independent groups, with such names as “Father Divine’s Peace Mission” and “Daddy Grace’s United House of Prayer for All People” also gained prominence. Today, approximately 90 percent of churchgoing African-Americans belong to black-controlled religious bodies. The remaining 10 percent belong to white-controlled religious bodies. African-Americans are also to be found within the memberships of liberal Protestant denominations, the Mormon church, the Southern Baptist Convention, and various groups such as the Jehovah’s Witnesses, Unity, and the Seventh-day Adventists. There are more than 2 million black Roman Catholics in the United States, many of them recent migrants from the Caribbean.

A number of prominent African-American religions in the United States are based on the teachings of Islam. Noble Drew Ali established the first of these, the Moorish Science Temple, in Newark, New Jersey, in the early twentieth century. The main teachings of the Moorish Science Temple were incorporated into the Nation of Islam, founded by Wallace D. Fard during the early 1930s in Detroit. Later, the Nation of Islam came under the leadership of the Honorable Elijah Muhammad. The Nation of Islam grew rapidly, in part due to the militant preaching of Malcolm X during the early 1960s. Rapid growth did not check schismatic tendencies that led to the appearance of numerous splinter groups, including the Ahmadiyya Muslim movement of Chicago, the Hanafis of Washington, D.C., and the Ansaru Allah community of Brooklyn. Following the assassination of Malcolm X and the death of Elijah Muhammad, Elijah’s son, Wallace D. Muhammad, transformed the Nation of Islam into the more orthodox group known as the American Muslim Mission. To counter the Mission’s shift to orthodox Islam, Louis Farrakhan established a reconstituted Nation of Islam.

Caribbean-based religions are among the fastest-growing religions in the United States. As noted above, Vodun, Rastafarianism, and the Spiritual Baptists have

established large congregations in New York, Los Angeles, Miami, and other urban centers, attracting Caribbean migrants and American blacks, as well as a small number of white converts. Cuban Santeria is perhaps the most racially mixed and widespread of these religions.

An African-American Aesthetic

African and African-American peoples do not conceptualize religion as something separate from the rest of their culture. Art, dance, and literature are understood as integral to the religious experience. This is aptly illustrated by musician B.B. King’s comment that he feels closest to God when he is singing the blues. Spirituals, the blues, gospel, rhythm and blues, bebop, Afro-Latin, and hip-hop are all rooted in West African sacred and secular music traditions. West Africans understand music as a means of propagating wisdom. In the Yoruba tradition, music stirs things up, it incites. West African music and art begin with God, the ideal. For example, Afro-Cuban music continues the African tradition of dispersing and expounding upon fixed and recurring God-generated themes that embody cultural ideals and values.

While African-American music is derived from a variety of sources, religion has historically served as one of its major inspirations. As Lincoln and Mamiya (1990, 347) observe, “In the Black Church singing together is not so much an effort to find, or to establish, a transitory community as it is the affirmation of a common bond that, while inviolate, has suffered the pain of separation since the last occasion of physical togetherness.”

Eileen Southern (1983) traced African-American spirituals to the camp meetings of the Second Awakening, where blacks continued singing in their segregated quarters after the whites had retired for the night. According to Lincoln and Mamiya (1990, 348), black spirituals also appear to have had their roots in the preacher’s chanted declamation and the intervening congregational responses.

The “ring shout,” in which “shouters” danced in a circle to the accompaniment of a favorite spiritual sung by spectators standing on the sidelines, was a common practice in many nineteenth-century black churches. By 1830,

many black urban congregations had introduced choral singing into their services. “Praying and singing bands” became a regular feature of religious life in many black urban churches. Despite the opposition of African Methodists and other religious leaders to the intrusion of “cornfield ditties” into formal worship services, folk music became an integral part of African-American sacred music.

According to Southern, black gospel music emerged as an urban phenomenon in revivals conducted in tents, football stadiums, and huge tabernacles. In 1927, Thomas A. Dorsey promoted what he called “gospel songs” in churches in Chicago, the Midwest, and the rural South. At a time when many Baptist and Methodist churches rejected gospel music, Sanctified churches (an aggregate of independent congregations stressing experience of the Holy Spirit and personal piety as keys to salvation) in both urban and rural areas embraced it wholeheartedly. The Church of God in Christ has been a strong supporter of contemporary gospel music. Spiritual churches (like the Israel Universal Divine Spiritual Churches of Christ, the Metropolitan Spiritual Churches of Christ, and the Universal Hagar’s Spiritual Church) also accepted gospel music, and in New Orleans jazz is an integral feature of their worship services. In time, many mainstream congregations have incorporated gospel music into their musical repertoires.

African-American religions in the Caribbean and the United States represent a coming together of African and European cultures in yet a third setting—that of the Americas. They are products of both voluntary and forced migrations, and represent a dynamic blending of Old World and New World faiths. E. Franklin Frazier (1964, 50-51) correctly argued that African-American religion historically has functioned as a “refuge in a hostile white world.” At another level, it has served as a form of cultural identity and resistance to a white-dominated society. In addition to serving as houses of worship, black churches were and are centers of social life, ethnic identity, and cultural expression in the African-American and Caribbean communities.

Stephen D. Glazier

Further Reading

- Baer, H. A., & Singer, M. (1992). *African-American religion in the twentieth century: A religious response to racism*. Knoxville: University of Tennessee Press.
- Brandon, G. F. (1993). *Santeria from Africa to the new world: The dead sell memories*. New Brunswick, NJ: Rutgers University Press.
- Chavannes, B. (1994). *Rastafari—roots and ideology*. Syracuse, NY: Syracuse University Press.
- Curtin, P. D. (1969). *The Atlantic slave trade: A census*. Madison: University of Wisconsin Press.
- Desmangles, L. G. (1992). *The faces of the gods: Vodou and Roman Catholicism in Haiti*. Chapel Hill: University of North Carolina Press.
- Du Bois, W. E. B. (1903). *The Negro church*. Atlanta, GA: Atlanta University Press.
- Frazier, E. F. (1964). *The Negro church in America*. New York: Schocken Books.
- Glazier, S. D. (1991). *Marchin’ the pilgrims home: A study of the Spiritual Baptists of Trinidad*. Salem, WI: Sheffield.
- Hall, S. (1990). *Cultural identity and diaspora*. In J. Rutherford (Ed.), *Identity: Community, culture, difference*. London: Lawrence and Wishart.
- Herskovits, M. J. (1941). *The myth of the Negro past*. New York: Harper.
- Lincoln, C. E., & Mamiya, L. (1990). *The black church in the African-American experience*. Durham, NC: Duke University Press.
- Mintz, S., & Price, R. (1992). *An anthropological approach to the Afro-American past. The birth of African-American culture: An anthropological perspective*. Boston: Beacon Press.
- Raboteau, A. J. (1978). *Slave religion: The “invisible” institution in the antebellum South*. New York: Oxford University Press.
- Southern, E. (1983). *The music of black Americans*. New York: Norton.
- Spencer, J. M. (1993). *Blues and evil*. Knoxville: University of Tennessee Press.
- Vergeer, P. (1968). *Flux et reflux de la traite des negres entre le Golfe de Benin et Bahia de Todos los Santos, du XVIIe au XIXe siecle* [Flow and backward flow of the draft of the Negroes between the Gulf of Benign and Bahia de Todos los Santos]. The Hague, Netherlands: Mouton.
- Zuckermann, P. (2000). *Du Bois on Religion*. Lanham, MD: AltaMira.

Afro-Eurasia

Afro-Eurasia designates the land masses of Africa and Eurasia, together with adjacent islands, as a single spatial entity. The concept of Afro-Eurasia is useful in the study of both historical and contemporary social phenomena whose full geographical contexts overlap in one way or another the conventionally defined continents of Africa, Asia, and Europe. A prominent example is the Roman empire, which politically unified societies all around the Mediterranean basin, a region that has a fairly uniform climatic and vegetational regime. Acknowledg-

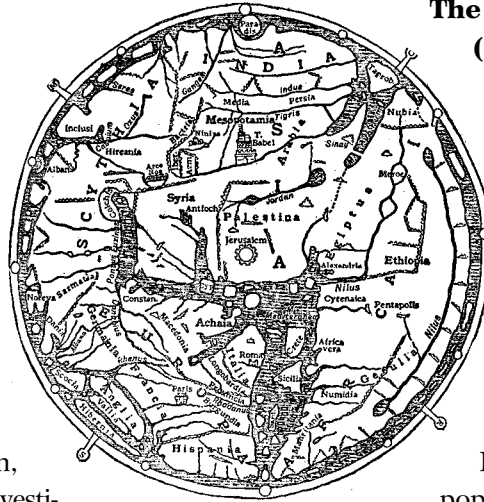
ment of the unity of the Mediterranean lands in the larger frame of Afro-Eurasia benefits the study of relatively large-scale developments in the empire, whereas a conception of the basin as made up of three primary and arbitrarily fixed sections—European, African, and Asian—may inhibit investigation of such processes.

The single land mass comprising Eurasia and Africa, the largest on the globe, has never acquired a distinctive and enduring name of its own. This is ironic, since geologists have named a number of great land areas, Pangea, Gondwana, and Laurasia, for example, that existed in earlier eons before the earth's tectonic plates arranged themselves into their current configuration. Afro-Eurasia is sometimes identified as the Eastern Hemisphere or the Old World as against the Western Hemisphere or the New World, that is, the Americas.

Afro-Eurasia's Geographical Profile

Extending from approximately 78 degrees north latitude to 35 degrees south latitude, Afro-Eurasia exhibits a multitude of distinctive climatic and vegetational zones from Arctic tundra to wet tropical forest. The supercontinent's topography is equally varied, including the highest point (Mount Everest) and the lowest point (the Dead Sea) on the earth's land surface. Afro-Eurasia's climatic and topographical diversity, however, did not deter human beings from populating, at least in sparse numbers, nearly all parts of the land mass and neighboring islands by about twenty thousand years ago. A satellite view of Afro-Eurasia reveals several prominent geographical features that have both challenged humankind's adaptive powers and facilitated travel, migration, and interchange.

Perhaps the most conspicuous feature from satellite distance is the lateral belt of arid and semi-arid land that extends from the North Atlantic coast of Africa to northeastern China. This chain of deserts, scrublands, mountains, and grassy plains includes the great Sahara and the



The English Hereford Map (c. 1280) shows Africa, Europe, and Asia.

Arabian, Kyzyl Kum, Taklimakan, and Gobi Deserts, as well as the dry Iranian Plateau and the semiarid steppes of Inner Eurasia. Except where river valleys run through or other water sources could be tapped, Afro-Eurasia's great arid zone has had low population density relative to the supercontinent's temperate and tropical zones. Nevertheless, human groups began as early as the seventh millennium BCE to adapt to arid lands by herding animal domesticates on seasonal grasses and eventually harnessing horses, camels, and oxen to carry loads and pull wagons across large expanses of rain-starved land.

Another prominent feature of Afro-Eurasia is the nearly continuous chain of highland ranges that stretches across the land mass from the Atlas Mountains of Morocco to the uplands of western China. Afro-Eurasian highlands have sometimes impeded human movement, notably north and south across the "roof" of the Hindu Kush, Pamirs, and Himalayas. Pioneer travelers, however, inevitably found the high passes, which thereafter became funnels of travel for merchants, missionaries, and conquering armies.

Because the Indian Ocean extends across much of the Eastern Hemisphere's tropical latitudes, Afro-Eurasia's only large expanse of tropical rainforest climate is in equatorial Africa, an area significantly smaller than Amazonia's wet tropics in South America. We must also include southern India, Sri Lanka, and Southeast Asia, both mainland and insular, as part of Afro-Eurasia's discontinuous tropical belt, lands where humans adapted ecologically in quite similar ways.

The Eurasian part of the supercontinent, whose long axis runs east-west, displays somewhat less floral and faunal diversity than does Africa, owing partly to its relatively narrower latitudinal range. Indeed, in his book *Guns, Germs, and Steel*, the geographer and evolutionary biologist Jared Diamond has argued that, because of the relative evenness of daylight and climate along Eurasia's long axis, food crops, animal domesticates, and related

In a borderless world we can go anywhere. If we are not allowed a good life in our countries, if we are going to be global citizens, then we should migrate North. . . . Masses of Asians and Africans should inundate Europe and America.

agricultural technologies have in the past ten thousand years diffused more easily across the region than they have along the long north-south axes of either Africa or the Americas. The reason is that in Africa and the Western Hemisphere migrating farmers and herders had to make repeated adaptations to new climatic conditions.

In Afro-Eurasia's northwesterly section, several seas penetrate deep into the land mass, which partially explain the relatively early intensification of human cultural exchange and attending technical innovation and population buildup in that region. Elsewhere on the land mass, long rivers and animal transport technologies facilitated contact between coastal and interior peoples. Moreover, the chain of seas in western Afro-Eurasia (the Baltic Sea, North Sea, eastern coastal Atlantic, Mediterranean and Black Sea, Red Sea, and Persian Gulf) connect to the southern seas (the Arabian Sea, Bay of Bengal, and the China Seas) to make for a transhemispheric chain of seas that from at least 4000 BCE permitted captains of sail craft to relay goods, ideas, and people from the far east to the far west of Afro-Eurasia.

How Many Continents?

Owing in large measure to the linguistic turn in social and literary research, most scholars today accept the proposition that human beings socially construct and name geographical spaces. Even mountain ranges and river valleys exist in nature only insofar as humans agree on the criteria for determining their characteristics, unity, and limits. Thus, nation-states, ethnic territories, climatic zones, and continents are invariably constructions susceptible to social acceptance, rejection, or modification over time. The idea of Afro-Eurasia is equally constructed as a place on the world map and as an arena of historical developments. So far, however, this construction has gained little attention or credence despite the supercontinent's ready discernibility on the globe and despite accumulating evidence of complex, long-distance intercommunication among its peoples since very ancient times.

The greatest impediment to recognition of Afro-Eurasia as a geographical entity has been what the geographers Martin Lewis and Kären Wigen call the myth of conti-

nents, that is, the doctrine that the world comprises seven major land divisions, three of them being Africa, Asia, and Europe. Western and Western-educated scholars fully articulated the idea that the earth is constituted of seven primary "land worlds" only during the first half of the twentieth century. As late as 1950, for example, geographers were not fully agreed that the Americas constituted two continents, rather than one, or that Australia deserved continental rather than merely large-island status.

Since the mid-twentieth century, however, the seven-continent scheme has become dogmatic in school textbooks, scholarly literature, geographical atlases, and the popular media, despite fundamental inconsistencies in the very definition of the word *continent*. If a continent is by conventional definition a large mass of land surrounded or nearly surrounded by water, why, critics of the sevenfold categorization have asked, do both Europe and Asia qualify as primary land masses, when no distinct watery division between them exists? Indeed, the conventional definition applies well to Australia, Antarctica, North America, South America, and Afro-Eurasia, making for five continents rather than seven. From this five-continent perspective we may perceive the Mediterranean, Red, and Black seas as internal seas of Afro-Eurasia, since they are inconsequential intercontinental partitions compared with the Atlantic and Pacific Oceans. Indeed, geographers, travelers, merchants, and soldiers have long known by experience the irrelevance of these waters as barriers to human contact. As soon as humans invented sturdy rafts and sailboats, which in the Red Sea region may have occurred as long as 100,000 years ago, people began to traverse these seas and transform them into busy channels of cultural and commercial exchange.

The ancient Greeks, whose world centered on the Aegean Sea, were the first we know of to identify Europe to the northwest, Asia to the east, and Africa to the south as distinct regions. But the Greeks also imagined these three zones as comprising parts of a larger integrated whole, the *orbis terrarum*, or "world island." Considering Greek commercial and colonial enterprise all around the rim of the eastern and central Mediterranean, as well as

If there is any strength that we have, it is in the numbers. Three-fourth of the world is either black, brown, yellow or some combination of all these. We will make all nations in the world rainbow nations . . . • DATO SERI MAHATHIR BIN MOHAMAD (B. 1925)

in the Black Sea region, such a holistic conception is hardly surprising. Roman scholars, by contrast, despite the empire's intercontinental span, tended to emphasize the threefold division. Medieval Christians drew maps of a world revolving around Jerusalem, a point technically in "Asia," but in their worldview the lands northwest of the Holy City, that is, Europe, possessed sharp cultural and historical definition, whereas most of Asia and Africa, lands of heathen darkness, did not.

Making of the Continents of Europe and Asia

Almost all societies that share language and cultural traditions also possess a foundational myth that situates themselves at the center of creation. Their territory is the place where the primordial creator made the first land mass and the ancestral human beings. From that "continent," as it were, humans went forth to populate the rest of the world. The Chinese self-perception as the people of the earth's "middle kingdom," the Hebrew story of the Garden of Eden, and the Muslim idea of the Dar al-Islam (land of surrender to God) versus the Dar al-Harb (land of war) have all served such mystiques of cultural and historical primacy.

The idea that Europe is one of the earth's primary land masses had its origins in Greek thought, took root in the Middle Ages, and became canonical in modern times, even as Western geographical knowledge accumulated to reveal the absence of any significant waterway or other physical partition separating the eastern side of Europe from what came to be known as Asia. Thus, Europe's status as a continent had to rest on exceptional criteria, specifically its possessing a population that exhibited distinct cultural characteristics—the shared heritage of Western Christendom. Whatever linguistic, cultural, and political differences divided Europeans from one another, they all shared, according to the theory, a piece of the world distinctive for *not* being Asia or Africa, lands inhabited by Muslims and other unfathomable strangers. However, because of the absence of any compelling physical border separating Europe from Asia north of the Aegean and Black seas, European

intellectuals struggled for several centuries to agree on the location of their continent's eastern, sealess border. Various rivers flowing north-south across Russia commanded followings, but in the nineteenth century, scholars reached general consensus that the Ural Mountains should be the marker. An obscure Swedish military officer first put forth this idea in the previous century, and pro-Westernizing Russians found it attractive because it emphasized "the European nature of the historical Russian core while consigning Siberia to the position of an alien Asian realm suitable for colonial rule and exploitation" (Lewis and Wigen 1997, 27). In the twentieth century, the Ural partition became dogmatic in Western academic and school geography. It largely remains so today despite the flood of historical evidence showing that those round-topped hills, whose highest peak reaches only 1,894 meters, have never thwarted human communication. Thus, the social construction of the "Continent of Europe" has well served the fundamentally flawed notion that the lands north of the Mediterranean and Black seas possess geographical singularity comparable to both Asia and Africa and that this European entity generated unique cultural ingredients and mechanisms that set it intrinsically apart from those two places, as well as from all other continents.

The eastern land frontier between Europe and Asia has not been the only continental demarcation subject to debate and revision. Medieval European geographers, for example, took it for granted that the Nile separated Africa from Asia, the Red Sea coming into its own as the conventional dividing line only in recent centuries. Contending for a racial definition of continents, a few scholars have asserted that the Sahara Desert, not the Mediterranean, properly splits Europe from Africa because the desert separates "white" populations from "black" ones.

In the late nineteenth century, scholars introduced the concept of Eurasia, though with a variety of definitions. Eurasia, characterized simply as Asia and Europe as a single land mass, though distinguished from Africa, relegates Europe to the status of subcontinent, that is, a large peninsula of Eurasia comparable to South Asia, Indochina, or Arabia. As the world historian Marshall Hodgson has

The first law of history is to dread uttering a falsehood; the next is not to fear stating the truth; lastly, the historian's writings should be open to no suspicion of partiality or animosity. • LEO XIII (1810–1903)

pointed out, this reordering averts the categorical pairing of huge and tiny countries, for example, the questionable notion that Luxembourg and Slovenia are countries on the continent of Europe paralleling China and India as countries in Asia. The idea of a Eurasian continent has also been useful in the study of numerous historical processes whose proper geographical frame is that land mass as a whole. These developments include the dispersion of Indo-European-speaking populations from China to Ireland between the fourth and first millennia BCE; the long-distance migrations and invasions of pastoral groups (Scythians, Germans, Huns, Avars, Magyars, Turks) in the past three millennia; the opening of the trans-Eurasian Silk Roads; the east-west flow of technologies, ideas, and religions; the forging of the Mongol empire in the thirteenth century; the rise of the Russian empire in the seventeenth; and the emergence of the Soviet Union after 1917. All these developments notwithstanding, however, Eurasia has not so far come close to disturbing the conventional school wisdom that the world has seven continents, not six.

Afro-Eurasia as an Arena of History

The failure of Eurasia to supersede Europe and Asia on the continental honors list suggests that Afro-Eurasia faces a steep climb to acceptance, despite its value in formulating questions about long-term and large-scale change in world history. The human eye can readily see Eurasia as a single bulk of land but requires serious re-education to perceive the Mediterranean and Red seas, together with the Suez Canal (whose navigational width is 180 meters), as something other than lines between great spatial compartments.

On the other hand, several scholars of world history have either explicitly or implicitly envisaged Afro-Eurasia as a single field of historical development, thereby ignoring or minimizing the conventional threefold division as having any bearing on the comparative or world-historical questions they wish to pose. In the early fourteenth century, when a chain of Mongol-ruled states stretched all the way from Korea to Bulgaria, the Persian

historian Rashid al-Din wrote the *Collected Chronicles*, an immense work of history and geography that encompassed not only the lands of the Dar al-Islam but also India, China, Inner Eurasia, the Byzantine empire, and Western Europe. Indeed, Rashid al-Din, along with other well-educated scholars and travelers of his time, may have been among the first people in world history to possess a consciousness of Afro-Eurasia in all its length and breadth as an interconnected whole. In the early modern centuries, when geographers were rapidly accumulating knowledge about the earth's every nook and cranny, European scholars wrote a number of "universal histories" that divided the world into primary parts, whether continents or civilizations, but that also acknowledged Asian peoples, if not yet Africans south of the Sahara, as having contributed in some measure to "Old World" history.

In the twentieth century, several world history pioneers, including Alfred Kroeber, Arnold Toynbee, Marshall Hodgson, William McNeill, and Leften Stavrianos, adopted varying conceptualizations of the "ecumene" (or in Greek, the *oikoumene*) to describe the belt of interlinked agrarian civilizations that began to emerge in the fourth millennium BCE and that eventually extended from the Mediterranean basin to the North Pacific. Hodgson frequently used the term *Afro-Eurasia* in connection with the ecumene, defined by him as "the various lands of urbanized, literate, civilization in the Eastern Hemisphere" that "have been in commercial and commonly in intellectual contact with each other..." (Hodgson 1954, 716). On occasion, Hodgson also employed the term *Indo-Mediterranea*, though without detailed explication, to delineate the region of intense human interactivity that ran from North India to the Mediterranean basin, a region that overlay parts of Asia, Africa, and Europe.

In *The Rise of the West: A History of the Human Community*, William McNeill postulated the progressive "closure of the Eurasian ecumene," that is, the interlinking of Eurasian civilizations, as a key historical dynamic, though his definition of Eurasia implicitly incorporated the Mediterranean and Indian Ocean littorals of Africa as well.



In the more recent book *The Human Web: A Bird's-Eye View of World History*, William and John McNeill have consistently used *Old World* as their term of choice for the Afro-Eurasian landmass, even though many scholars have rejected this phrase as Eurocentric, that is, as one implying that the Americas were a new world whose history began when Europeans discovered them.

Philip Curtin, another world history leader, has also described “the gradual formation and spread of a series of intercommunicating zones, beginning from small points in the river valleys and spreading gradually to larger and larger parts of the Afro-Eurasian land mass” (Curtin 1995, 47). In *ReOrient: Global Economy in the Asian Age*, Andre Gunder Frank contends that in large-scale investigation of the development of the world economy between 1400 and 1800, Afro-Eurasia is a far more relevant geographical unit than Europe, Asia, Africa, or even Eurasia. Arnold Toynbee recognized the climatic, ecological, and historical contiguity of the Sahara and Arabian deserts by coining the term *Afrasian steppes*, an expression that transformed the Red Sea from a continental partition to a long, narrow lake *within* the Afro-Eurasian arid zone. The historian Michael Pearson has suggested that *Afrasian Sea* might well replace *Arabian Sea* in order to acknowledge the long historical associations among peoples of the East African coast, Arabia, Persia, and India. Indeed Pearson, Frank, and Ross Dunn have proposed the term *Afrasia* as an alternative to Afro-Eurasia in order to award the land mass a more distinctive name and to erase the hyphenation (Pearson 1998, 36; Frank 1998, 2-3; Dunn 1992, 7). However, this innovation, which conceptually embraces Europe but omits the combining form *Eur-*, has so far attracted few academic buyers.

As the literature of transnational, interregional, and global history has accrued, both scholars and teachers have recognized the liabilities of accepting conventional geographical expressions as natural, fixed, or timeless, because these presumed entities may impose arbitrary and distracting barriers to investigating historical phenomena in their totality. Thus, in order to formulate comparative and large-scale questions about developments

that have occurred in the world, historians interested in comparative and large-scale change have in recent years taken a more situational and fluid approach to geographical contexts, shaping them to the specific historical problem at hand. These spatial reorientations include conceptions of the Atlantic basin, the Pacific basin, the Indian Ocean rim, the Mediterranean-Black Sea rim, and Inner Eurasia as zones of interaction different from and sometimes historically more serviceable than the conventional conceptions of civilizations and continents. Afro-Eurasia is simply one among several useful geographical categories, one that should not replace Europe, Africa, and Asia as named areas on the world map, but rather be put to work as a useful tool in the historian's methodological kit.

Ross E. Dunn

See also Geographic Constructions; Human Evolution—Overview

Further Reading

- Curtin, P., Feierman, S., Thompson, L., & Vansina, J. (1995). *African history: From earliest times to independence* (2nd ed.). New York: Longman.
- Diamond, J. (1993). *Guns, germs, and steel: The fates of human societies*. New York: W. W. Norton.
- Dunn, R. E. (Ed.). (2000). *The New World History: A Teacher's Companion*. Boston: Bedford St. Martin's.
- Dunn, R. E. (1992). Multiculturalism and world history. *World History Bulletin*, 8(Spring–Summer), 3–8.
- Frank, A. G. (1998). *ReOrient: Global economy in the Asian Age*. Berkeley and Los Angeles: University of California Press.
- Hodgson, M. (1954). Hemispheric interregional history as an approach to world history. *Journal of World History/Cahier d'Histoire Mondiale*, 1(3), 715–723.
- Hodgson, M. G. S. (1974). *The venture of Islam: Conscience and history in a world civilization*. Chicago: University of Chicago Press.
- Hodgson, M. G. S. (1993). *Rethinking world history: Essays on Europe, Islam, and world history*. (W. Burke III, Ed.). Cambridge, UK: Cambridge University Press.
- Kroeber, A. L. (1944). *Configurations of culture growth*. Berkeley and Los Angeles: University of California Press.
- Lewis, M. W., & Wigen, K. E. (1997). *The myth of continents: A critique of metageography*. Berkeley and Los Angeles: University of California Press.
- McNeill, J. R., & McNeill, W. H. (2003). *The human web: A bird's eye view of world history*. New York: W. W. Norton.
- McNeill, W. H. (1963). *The rise of the West: A history of the human community*. Chicago: University of Chicago Press.

So often people say that we should look to elderly, learn from their wisdom, their many years. I disagree, I say we should look to the young: untarnished, without stereotypes implanted in their minds, no poison, no hatred in their hearts. When we learn to see life through the eyes of a child, that is when we become truly wise. • MOTHER TERESA (1910–1997)

Pearson, M. N. (1998). *Port cities and intruders: The Swahili coast, India, and Portugal in the early modern era*. Baltimore: Johns Hopkins University Press.

Stavrianos, L. S. (1998). *A global history: From prehistory to the 21st century* (7th ed.). Englewood Cliffs, NJ: Prentice Hall.

Toynbee, A. J. (1947). *A study of history*. New York: Oxford University Press.

Age Stratification

Societies stratify (differentiate) their members by a variety of criteria, such as age, gender, race, and class. Age stratification—along with gender stratification—may be the oldest criteria for differentiation, resulting in the formation of roles and social statuses based on age.

People are born into an age cohort, which is all those people born during the same time interval (usually a five- or ten-year interval). The age cohorts in a particular society at a particular time represent all the age strata. Each society has an age structure, which is composed of age strata and associated roles. Population trends, such as increasing life expectancy during the twentieth century and decreasing fertility in industrialized countries, affect the number of persons in each age stratum. Members of an age stratum share certain aspects of life, such as a past, present, and future. For example, a person who was age thirty in 1940 in the United States lived through World War I and the Great Depression and was in the midst of World War II.

Each society has a distinctive way of structuring roles based on age. Biology partially determines how roles, such as the role of parent, are structured, but the great variety of age-related roles and behaviors attests to the social and historical construction of age structuring. People move through an age stratum, such as infancy or old age, in roles and statuses related to that age stratum. As people pass through the life cycle, they change. At the same time, the social structure consisting of roles, cohorts, and institutions changes. Elements of culture, such as the socially determined segments of a life cycle or the perceptions of what is appropriate for persons of various ages, change as well.

Many social roles are determined or available based on age. Events in the life cycle, such as education, employment, marriage, and birth, are based on age; thus, the social roles that accompany those events are directly related to age. The appropriate age range for life-cycle events varies between cultures and through time. Age ranges may be relatively broad or relatively narrow. The expression “acting one’s age” derives from societal expectations that certain behaviors are appropriate only to certain ages.

Age Integration and Segregation

Age integration joins members of different age strata, whereas age segregation separates groups of people and differentiates their social roles. In the United States after the American Revolution, poor older people lived in age-integrated almshouses. Co-residence of older parents and adult children is an age-integrated practice more common today in Asian than in Western cultures. During the twentieth century age-segregated housing arrangements among older adults became quite popular in the United States. Some studies show that when older adults are congregated in housing facilities, greater opportunities may exist for age integration with the local community.

Age stratification affects all parts of the life cycle. For example, among the Tiriki and Irigwe people of East and West Africa, old men are accorded privileges and status based on having had sons who produced grandchildren. At the other end of the life cycle, uninitiated Tiriki boys are socially part of the same group as children of both genders and women, separated from adult men. In Azteceera village life, historical accounts report, older males had the unique roles of speechmaker and preparer of corpses, and older women were midwives and arranged marriages. Both groups were permitted to drink in public, a privilege not extended to other age strata.

Kinship Systems

Age stratification intersects with gender and kinship systems. Since the beginning of agriculture unilineal (tracing



In many societies, young men and women undergo a ritual when they move from one age status to another. This drawing shows a young Tohono O’odham (Papago) man in Arizona fasting in the desert as part of the ritual initiation into adulthood.

For most of human history and for small-scale cultures, age was an important principle of social organization, but time was not as important as it is in industrialized societies today. People became old, for example, not because they turned sixty-five but rather because their abilities to function were diminished. In preindustrial

descent through either the maternal or paternal line only) kinship systems, which create age-based groupings, have been common. Anthropologists have suggested that in Latin America and Africa, the relationship between age and kinship often functions to decrease conflict either by separating groups or binding them. Age stratification is also interwoven with class stratification and may serve as the basis for power and privilege. During the 1860s in Italy, for example, the annual household tax register shows that for the property-owning classes, adulthood was divided into two groups: younger than twenty-one and older than twenty-one. Three groups existed for peasants: younger than eighteen, eighteen to fifty-nine, and older than sixty. The social meaning of these distinctions was that when property-owning males turned twenty-one, they could take responsibility for their holdings. Peasants became adults at eighteen, when they were able to begin manual labor, and gave up this status when manual labor became more difficult. Women were not divided by age at all.

Europe historical accounts suggest that most people “stepped down” from work in a gradual manner, but at some peasant family dinners the family members requested that the head of the family “rest” and let the oldest son take over the leadership of the farm.

In industrialized society age stratification is influenced by the social policies of the state, for example, in setting minimum ages for work, driving, or mandatory retirement. Major stages of the life cycle include childhood, adolescence, adulthood, and retirement. At each of these stages the modern state regulates work and family issues. Age determines when people go to school, serve in the military, vote, and are eligible for retirement benefits. Increasing involvement of the state in the life cycle of people may suggest that age is increasing in importance as a principle of social organization in Western industrialized societies.

Sally Bowman

See also Childhood; Adolescence

So much has been said and sung of beautiful young girls, why don't somebody wake up to the beauty of old women? • HARRIET BEECHER STOWE (1811–1896)

Further Reading

- Achenbaum, W. A., Weiland, R., & Haber, C. (1996). *Key words in sociocultural gerontology*. New York: Springer.
- Frye, C. L. (1996). Comparative and cross-cultural studies. In J. E. Birren (Ed.), *Encyclopedia of gerontology* (Vol. 1, pp. 311–318). New York: Academic Press.
- Keith, J. (1989). Cultural commentary and the culture of gerontology. In D. I. Kertzer & K. W. Schaie (Eds.), *Age structuring in comparative perspective* (pp. 47–54). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Kertzer, D. I. (1989). Age structuring in comparative and historical perspective. In D. I. Kertzer & K. W. Schaie (Eds.), *Age structuring in comparative perspective* (pp. 3–20). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Riley, M. W. (2001). Age stratification. In G. Maddox (Ed.), *The encyclopedia of aging* (3rd ed., pp. 46–49). New York: Springer.
- Plakans, A. (1989). Stepping down in former times: A comparative assessment of “retirement” in traditional Europe. In D. I. Kertzer & K. W. Schaie (Eds.), *Age structuring in comparative perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Riley, M. W., Johnson, M. E., & Foner, A. (Eds.). (1972). *Aging and society: Vol. 3. A sociology of age stratification*. New York: Russell Sage Foundation.
- Sangree, W. H. (1989). Age and power: Life-course trajectories and age structuring of power relations in east and west Africa. In D. I. Kertzer & K. W. Schaie (Eds.), *Age structuring in comparative perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Sokolovsky, J. (Ed.). (1997). *The cultural context of aging: World wide perspectives* (2nd ed.). Westport, CT: Bergin & Garvey.
- Won, Y. H., & Lee, G. R. (1999). Living arrangements of older parents in Korea. *Journal of Comparative Family Studies*, 30, 315–328.

Agricultural Societies

All societies are pluralistic, encompassing multiple organizational and technological systems. In an agricultural society a substantial part of the means of human subsistence comes from one or more agricultural systems (i.e., systems of domesticated plants and animals that depend upon a specific technology and system of management).

Ecologically, the major agricultural systems can be divided broadly into Old World and New World types. Organizationally, they divide into household/peasant, elite, and industrial. A society’s agricultural systems interact with its kinship, political, religious, and economic systems, among others.

Within each organizational type in each ecological

framework, agricultural systems differ in degree of intensity. Intensity means the total of inputs to and outputs from each unit of land, and can be measured in terms of calories of energy. The most general trend in the development of agricultural systems is an interaction between population and intensification. Within the framework of a system, population builds up and intensification increases until it reaches its internal limits of sustainability. At that point the system either changes to permit still further intensification or it collapses.

Contrasting Ecologies

The difference between Old World and New World agricultural ecologies lies in the different ways they renew soil fertility. In long-fallow systems worldwide, such as swidden agriculture, this is accomplished by natural organic processes of plant growth and decay. By planting a field that has lain fallow the farmer brings the crops to the accumulated fertility. In short-fallow systems, by contrast, fertilizer must be brought to the crops. In Old World systems, this is accomplished with domestic animals, mainly ungulates. By converting parts of the crops the farmer cannot use into materials and foods that he can use, the animals reduce the total cropped area needed while their manure restores fertility. They provide additional organic material by the common practice of grazing beyond the farmed area in the day and returning at night. A variant of this system, important in Africa where the tsetse fly makes it impossible to keep cattle in fixed locations, is a symbiotic relation between mobile herders and sedentary farmers in which farmers allow the herders to graze cattle on their stubble in exchange for the herder keeping the cattle overnight on the farmer’s land.

New World agricultural ecologies do not incorporate domesticated animals and hence have no manure cycle. Instead, fertilizing materials are generally brought to the fields by some form of water transport. This is done in two main ways: with water collection and with *chinampas*, floating beds in lakes and swamps. Water collection mainly involves either waterborne silt from rivers carried in irrigation channels or flow from volcanic ash fields or eroding rocks. Although New World farmers recognized the value of organic methods such as fish buried with the

seeds, these generally demand too much labor to use on a large scale.

Without domesticated animals, there were relatively few places in the New World where a society could depend wholly on agriculture, and those were surrounded by large areas where societies continued to be organized for hunting and gathering—sedentary pockets surrounded by mobile raiders. By contrast, agricultural communities of the Old World spread into much more of the total landscape, settled it more densely, and consistently obliterated the hunting and gathering communities that remained in between their settlements. This difference had important consequences for the way their respective organizational systems developed.

Old World

Settled communities cultivating wild plants first appeared in the Old World about 10,000 BCE. Domesticated versions of these same wild plants first appeared in such communities around 7000 BCE, in the “fertile crescent” around the Jordan valley and on the flanks of the nearby Taurus and Zagros mountains; they included emmer and einkorn (ancient varieties of wheat), barley, lentils, chickpeas, pea, bitter vetch, and flax. Domesticated animals appeared shortly thereafter: sheep, goats, humpless cattle, horses, and pigs. The presence of domesticated plants necessarily implies that farmers are planting each new crop from seeds harvested previously. Once this practice is established the crops can be spread into wholly new areas and evolutionary change can occur rapidly.

Agriculture spread by both diffusion of ideas and cultigens from group to group and by the migration of whole groups, with migration apparently the most prominent of the two processes. Domesticated crops reached the Balkans in the seventh millennium BCE, brought by immigrants. Farming villages appeared in southern France by 5000 BCE. Beginning about 5400 BCE agricultural villages of a distinctive culture called Bandkeramik spread from the area of Hungary to the Netherlands. The first agricultural settlements in South Asia appeared in the beginning of the seventh millennium BCE in what is now southern Afghanistan, with a Middle Eastern mixture of

The Annual Cycle

The annual cycle of preparing the fields, planting, and harvesting has always defined life in farming communities. The following extract summarizes the annual farming cycle in a farm village in central Turkey.

As soon as the spring comes, the men get busy. The oxen weakened by the long winter must be got into training work, and spring ploughing and sowing must be done. The ox-herds and shepherds take charge of the animals. The sheep are lambing and in each household a woman must be ready at midday to milk the ewes. Ploughing and sowing of spring wheat and barley is immediately followed by the ploughing of the year's fallow, which goes on perhaps into May, even until June, depending on individual circumstances. Meanwhile the vineyards must be dug over, and potatoes and other vegetables sown. Most of this later work is done by women.

In June, all grasses and weeds growing in odd places among the crops are cut for hay, again mostly by women. During late May and June the men are comparatively idle. In July the harvest begins, first with vetch and lentils, then with the main crops of rye and wheat. Threshing follows the reaping; reaping, threshing, and storing together last about two months of ceaseless activity for everyone; a whole household frequently works right through a moonlit night.

In September the pressure eases. As soon as rain falls on the hard baked ground—even before, if the rains are late—the men must plough again and sow their winter rye and wheat. By November there remains for the men only a visit to town to lay in supplies of coffee, paraffin, salt and so on, and perhaps cheap vegetables for the months of winter isolation, and then idleness again until the spring. He was overstating his case and, as someone commented, in two months' harvesting they do four months' work; but the idea of having, like an English agricultural labourer, to work for wages day in and day out all year round was greeted with horror.

Source: Sterling, P. (1965). *The Village Economy* (p. 47). London: Charles Birchall & Sons.



A view of small holdings in the state of Minas Gerais, north of Rio de Janeiro. Brazil is now one of the world's largest exporters of agricultural products with large industrialized farms in the southern part of the country, leaving small farmers struggling to find niche markets for their produce. Many of the farmers in this region sell their produce in farmers' markets in the nearby city of Belo Horizonte.

crops and animals. However, roughly contemporary agricultural settlements in the Vindhyan Hills, just south of the Ganges plain, grew rice. Agricultural communities appeared in the Chang (Yangzi) valley in China from 7000 to 5800 BCE, growing rice in the lower part of the valley and millet in the upper. The millet was domesticated; it has not been determined whether the rice was. Domesticated grains appear much later in Japan and Southeast Asia, but in the former case, at least, this is because of the importance of tubers, particularly taro.

The archaeological remains of these early communities are consistent with peasant/household organization: small unwallled hamlets or villages with houses either adjoining or separate, with storage pits or areas and

sometimes ceremonial areas. There is typically little evidence of social stratification, but there are usually burial practices that suggest that the presence of one's ancestors implied entitlement to property. Taking into account ethnographic analogies, the configurations generally suggest a three-tier organization based on household, village, and various forms of kinship based on organization generally described as "tribal." Households, probably often connected to each other by kinship, farm their own plots of land with village agreement and cooperation. Groups of villages recognize themselves as affiliated and are mutually supportive but lack any formal overriding structure.

Elite agriculture first appeared about 3000 BCE, along with city-states, bronze tools and weapons, large-scale

The sun, with all those planets revolving around it and dependent on it, can still ripen a bunch of grapes as if it had nothing else in the universe to do. • GALILEO GALILEI (1564–1642)

irrigation, and the first forms of writing. It took the form of a hereditary military aristocracy and an at least partially hereditary priesthood, each of whom had specific governmental powers, and large estates set aside to support those powers. Sumerian records describe large-scale “grain grinding households” and “weaving households,” associated with the “patrimonial sovereign” and the temple, producing textiles and foodstuffs (Gregoire 1992, 225). They used corvee labor drawn from the peasants, and the accounts show that it was the responsibility of the temple and palace to provide for their maintenance while they were working. The *Iliad* describes Agamemnon as maintaining a similar establishment, but using the labor of slaves taken in war. Conflicts between city-states led to ever fewer and ever larger alliances, and by 600 BCE this process ended with the transition to imperial systems, in which the conquering power no longer sought the destruction of the opposed city-states but rather sought to subordinate them in a larger hierarchy of command and privilege.

The South Asian chronology was similar. The Indus Valley Civilization, beginning around 2300 BCE, was a uniform and well-organized peasant society in which communities cooperated as part of a single system. It collapsed in about 1790 BCE, however, after an earthquake diverted one of the two main rivers it was built on upon. The population apparently dispersed into surrounding areas, particularly the Ganges plain, retaining agricultural continuity but losing social cohesiveness. In the Ganges valley, there were no fewer than sixteen walled cities by 600 BCE, engaging in mutual conflict comparable to that of the Mesopotamian city-states. By 321 BCE, this conflict had led to the establishments of the Mauryan empire.

In China, walled cities appeared with China’s first dynasty, the Xia, and continued into the succeeding Shang (1766–1045 BCE). Beneath the Shang monarch as a general hereditary overlord were large numbers of local rulers holding hereditary title, the first form of the Chinese distinction between the peasantry and the privileged gentry.

All of the imperial systems involved some mixture of elite extraction from peasant production side by side with

large-scale enterprises under direct elite control, usually operated with unfree labor. The pattern persisted when the Asian empires were absorbed into European colonial systems. Before then, however, there was a development that was to have fundamental long-term implications for the way the different imperial systems evolved and interacted: the development of democratic constitutions at the city level.

The central aim of the Roman idea of a republic was to find a way to balance the interests of the peasant agriculture of the *plebes* with the elite agriculture of the *gentes* in a single political system that guaranteed security for all. The solution was carried to the many Roman colonies in the territories that the republic conquered. It persisted in the form of their civic constitutions after the empire collapsed and evolved as these Roman enclaves evolved into towns of the various European nationalities we recognize today. But in the course of this evolution there was a radical realignment of interests. Where the original Roman senatorial fortunes were based on elite agriculture utilizing land taken in war, Renaissance fortunes were based on commerce. Their interests, therefore, no longer supported imperial power and opposed independent peasant farmers but the reverse.

Outside of what had been Roman Europe—in Russia, South Asia, Southeast Asia, China, and Japan—towns remained under the control of the imperial authorities, a situation that supported elite agriculture. The consequence was that the peasantry often had no way to avoid serfdom, and there was no one to serve as the kind of independent engine of technological innovation that led Europe first to expand trade, then to destroy feudalism, and finally to industrialize.

Although programs for land reform that began in the late eighteenth century were aimed at freeing peasant agriculture from accumulated elite impositions, these were not notably successful outside the West. The Communist revolutions in Russia and China replaced whatever autonomous peasant organization remained in their respective areas with collectivization as a new form of elite control, at significant cost in lives and productivity. Since World War II, however, colonial empires and the

The Sacred Digging Stick

Religious rituals to help insure a good crop have always been an important element of planting and harvesting in farming communities around the world. The following example is from the Tikopia of the South Pacific.

The next morning everyone of the yam group had to be awake long before dawn, for this was the day of planting. I was told “the yam is planted in the night”—a statement too near truth for my comfort. The reason given was that “the yam should be hidden in the woods” before people stirred in the villages, so that the paths might not be contaminated by ordinary affairs. It was said that this was the command and practice of the Atua i Kafika, though no express utterance to this effect was known.

On each occasion I came over from my house in Faea soon after four a.m. When the people of the household had been roused from sleep one man was sent off first with the *koso tapu*, the sacred digging stick, a piece of wood some seven feet long, pointed at both ends, one of which was ornamented by some roughly cut notches.

This implement is one of the most intensely sacred articles in the island. Through its association with the

yam, the vegetable foodstuff of primary significance, this digging stick has become as it were the prototype of all instruments of cultivation, the material symbol of agriculture. Like all other objects in this particular context it is regarded as the property, even the embodiment, of the Atua i Kafika, and therefore must be handled with extreme care, and only by persons authorised by the Ariki and at the appropriate time. No woman, for instance, would dare to touch it, nor is it probably ever seen by them. It is kept normally at the far end of the Kafika temple, and the custom is to hang a few kava leaves over it in token of its unique value and importance. As the implement decays it is replaced by a fresh one, but as its use is ritual, not practical, it lasts for many years without attention. The stick employed in 1928–9 was very frail, so much so that the Ariki, in handing it over to the man who was appointed to carry it, gave the caution “That one has become aged; go carefully lest you stumble in the path.” The bearer, out of deference to his sacred burden, had a clean white strip of bark-cloth wound as an extra cincture round his waist and a bundle of scented leaves stuck in the back of his girdle. The significance of these in ritual matters has already been

Soviet Union have been dissolved, and the newly emergent nations have tended toward agrarian reforms that favor peasant/household management. At the same time, the green revolution and related developments in agribusiness have made available to peasant/household production far more productive varieties of plants and animals, producing a “neo-technic” form of peasant agriculture integrating household management with large-scale organizations for economic and technical support that was formerly unavailable.

New World

In the New World one cereal crop stands out as far more important than all others: maize. The earliest known domesticated maize was found in a dry cave in the Tehuacan Valley of central Mexico and dates to about

5000 BCE. But it was far different from what the grain is now and far less productive and useful than the first domesticated Old World grains. Although clearly showing the hallmark of domestication—that the husk surrounded the entire ear and not the individual seeds—the ears were less than an inch long. Evidence of purposeful cultivation appeared about 1,500 years later in the same area, by which time maize was accompanied by beans, squash, chili, gourds, and amaranth. By 1500 BCE the Tehuacan maize was notably improved in both yield and nutritional quality, but even before then it had spread to other areas. Maize found in Bat Cave on the Colorado Plateau has been dated to about 2100 BCE. Small communities practicing irrigated agriculture appeared in the American Southwest by 300 BCE. Larger villages, or pueblos, with extensive canal systems and terraced fields



explained. The sanctity of the *koso* required also that its bearer should precede the rest of the working party and go alone. Soon after he had disappeared in the darkness another man was dispatched with the *fakaora*, a basket containing food from the oven of the day before to provide the offerings in the cultivation, and following him went a youth with the little kit of seed yams. All these articles were *tapu*, hence their bearers had to proceed apart from the crowd so that they were not contaminated. . . .

As the sky was brightening before the dawn the party reached the mara, to which they had been preceded by the bearer of the *koso tapu* and his comrades. Immediately the work began. They all sharpened the ordinary digging sticks which they brought with them, or hastily cut fresh ones from shrubs on the border of the clearing. The bearer of the sacred implement stood alone and silent at the far end of the field; he had held communication with no one since leaving the house in Uta. The Ariki put on his ritual necklet of coconut frond, and the black pani stripe was drawn down his forehead.

Source: Firth, R. (1940). *The work of the Gods in Tikopia*. (pp. 123–124). London: The London School of Economics and Political Science.

appear about 500 CE, including those of the Anasazi, whose descendants appear to include the modern Hopi and the Hohokam whose canals can still be seen in the city of Phoenix. In eastern North America domestication of local plants (marsh elder, sunflower, chenopods, and cucurbits) began about 1500 BCE. Maize appeared about 600 CE, but since rainfall there is generally adequate without irrigation it did not dramatically influence the size of population concentrations.

Generally, everywhere north of the Valley of Mexico agriculture was based on peasant/household production. On the basis of known historic patterns together with archaeological evidence, it can be stated that the key organizational units were household, clan, and village. Land ownership rested mainly with clans. Households farmed on the basis of clan rights. Clan rights were in

turn supported by local consensus among councils of clan representatives. A village ceremonial hierarchy, staffed on the basis of clan prerogatives, controlled the annual cycle of activities, which included key agricultural dates.

The largest urban populations in the Mexican area were in the sites of original domestication, beginning with the Olmec civilization (1200 to about 400 BCE) and continuing through Teotihuacán, the Valley of Oaxaca, the Toltecs, the Chichemics, and the Aztecs. Although we know little about the Olmec organization, from Teotihuacán on it seems clear that in these states the relation between urban elite and the peasantry in the villages was not that between a populace and their specialized leaders and defenders but rather between conquerors and conquered, seemingly reflecting a takeover by a tribal group who converted themselves into a militaristic ruling class. The elites imposed heavy levies of produce, labor, and eventually sacrificial victims and concentrated on building enormous ceremonial centers representative of an ideology intended to perpetuate their rule. They engaged in large-scale manufacture and apparently long-distance trade. They did little, however, for those they subjugated. There was, for example, no really large irrigation system in the region, such as could not have been built by the local communities alone. There was also nothing that could be construed as state support for private commerce, such as harbor facilities, inns, or even coinage. In this area the populations of the principal ceremonial centers rose and fell with the power of the group that built them, rather than persisting through a succession of rulers. Teotihuacán, for example, had an estimated population of 200,000 in 500 CE but was abandoned forever around 750 CE, after a fire. The population of the villages, by contrast, seems to have built up fairly steadily.

The pattern in the northern Andes and the adjacent Pacific coast was similar. Beginning around 1200 BCE local communities practicing irrigated agriculture developed in river valleys in the mountains and on the coastal plains. Through local conflicts these built up into

We have been God-like in our planned breeding of our domesticated plants and animals, but we have been rabbit-like in our unplanned breeding of ourselves. • ARNOLD JOSEPH TOYNBEE (1889–1975)

a succession of progressively larger and more militaristic states: the Chavin, the contemporaneous Moche and Nazca, the Chimú, and finally the Inca, based in Cuzco, who established their dominance in the 1470s. The Inca demanded two-thirds of all production and large corvees of labor to build huge road systems, storage facilities, and extraordinary mountain cities with terraced fields that could not possibly have paid for themselves in economic terms. Manufacture of cloth goods and utilitarian and craft objects was organized and standardized on a large scale. When groups under pressure from the Inca fled to avoid conquest, the Inca sent colonists to replace them. When Pizarro arrived in 1532 and captured the ruler, the system collapsed.

The Mayan civilization of the Yucatán peninsula was different only in that the Mayan elite seem to have been indigenous, and they actually did perform functions crucial to productivity. Mayan civilization appeared essentially complete in the archaeological record about 2000 BCE and persisted continuously until the middle of the fourteenth century, when it collapsed in a series of civil wars and the areas were depopulated. The population centers were temple and palace complexes surrounded by many small hamlets and large areas of a type of *chinampa* technology.

When Europeans arrived Old World agriculture arrived with them, but the pattern differed in English-speaking and Spanish-speaking areas. In the former most of the management was peasant/household, and because Old World peasant agriculture supported far higher population densities than New World peasant agriculture, it completely displaced the latter wherever the two systems competed for land.

In the Spanish-speaking areas, by contrast, the main Old World management pattern was elite and the management system displaced was therefore its New World counterpart, leaving the peasant systems more or less as they were. The most extensive result was the “latifundia/minifundia” situation of large European-owned haciendas, mission estates, and other elite enterprises being laid over indigenous villages in which the villagers retained rights to carry on with their own subsistence agriculture

but were also subject to demands to perform work for the larger unit.

Old World agricultural ecologies are now clearly dominant in the New World as well as the Old. Yet New World technology persists in a wide range of environmental niches that Old World agriculture has not been adapted to: the Hopi mesas with eight inches of annual rainfall, Mexican milpas whose owners rely on traditional maize as a low-cost subsistence base, the high Andes, and the Amazon rain forest.

Industrial Agriculture

Industrial agriculture responds to the higher levels of per-capita output permitted by the industrial revolution. Ecologically, it breaks up the animal–plant interdependence at the farm level by separating animal production facilities from crop production, providing manures from industrial sources, and requiring farmers to produce to industrial specifications rather than consumer preferences. Organizationally, it makes farm management part of the system of factory production, replacing inter- and intra-household relationships and elite prerogatives with relations based on commercial contracts between farmers and industrial organizations. At the extreme, in areas such as California’s Imperial Valley, farmers are not landowners of any kind. Corporations own much of the land, and farmers are contractors who agree to produce the desired crop for delivery at a specific time. The farmer may own a core of farm machines, will hire whatever additional inputs are needed to produce the crop, and then move on to the next contract.

Industrial agriculture is highly specialized. The on-farm population of the United States is now 2.5 percent of the total population, but it is supported by people in rural and urban areas engaged in agricultural finance, storage, primary processing, government, trade, transport, research, and education who make up not less than 20 percent of the total. When this entire group is taken as the unit for comparison from one society to another, it is easier to see how industrial agriculture arises and to avoid overstating the contrast between agrarian and industrial society.

Current Trends

The relative importance in the world agricultural economy of peasant/household and industrial production is now increasing while elite agriculture is in decline, but both modern peasant/household farming and industrial farming pose challenges. The green revolution's reliance on increased chemical fertilizers and pesticides has led to serious water, air, and even oceanic pollution. The main hope for reducing such damage while still increasing yields rests with our increasing ability to modify plants by transferring genes from other species. However, several types of destructive business practices associated with the firms that have pioneered the commercial development of this technology have exposed serious deficiencies in the way current law addresses the interests of the great mass of agriculturalists and agricultural stability. Efforts to correct them have been going forward very slowly.

Murray J. Leaf

See also Cereals; Horticultural Societies

Further Reading

- Bayless-Smith, T. P. (1982). *The ecology of agricultural systems*. Cambridge, UK: Cambridge University Press.
- Boserup, E. (1981). *Population and technological change: A study of long-term trends*. Chicago: University of Chicago Press.
- Gregoire, J.-P. (1992). Major units for the transformation of grain: The grain-grinding households of southern Mesopotamia at the end of the third millennium BCE. In P. C. Anderson (Ed.), *Prehistory of agriculture: New experimental and ethnographic approaches*. Monograph #40. Los Angeles: Institute of Archaeology, University of California.
- Higham, C. (1995). The transition to rice cultivation in southeastern Asia. In T. D. Price & A. B. Gebauer (Eds.), *Last hunters first farmers*. Santa Fe, NM: School of American Research Press.
- Leaf, M. J. (1984). *Song of hope: The green revolution in a Punjab village*. New Brunswick, NJ: Rutgers University Press.
- Schusky, E. L. (1989). *Culture and agriculture*. New York: Bergen & Garvey.
- Smith, B. D. (1998). *The emergence of agriculture*. New York: Scientific American.
- Turner, B. L., & Brush, S. B. (1987). *Comparative farming systems*. New York: Guilford Press.
- Zohary, D. (1992). Domestication and the Near Eastern crop assemblage. In P. C. Anderson (Ed.), *Prehistory of agriculture: New experimental and ethnographic approaches*. Monograph #40. Los Angeles: Institute of Archaeology, University of California.
- Zohary, D., & Hopf, M. (2000). *Domestication of plants in the Old World* (3rd ed.). Oxford, UK: Oxford University Press.

AIDS

The appearance in Western medical literature in 1981 of a strange and inexplicable cluster of clinical manifestations—unusual opportunistic infections, cancers, and metabolic or neurological disorders—marked the emergence of what would become a global pandemic known as acquired immune deficiency syndrome, or AIDS. Efforts to find a cure for AIDS are in full swing at the beginning of the twenty-first century, but initial responses to the onset of the crisis were sluggish. Those responses have been determined by cultural attitudes toward disease (both epidemic and sexually transmitted) and by the socioeconomic disadvantages of the populations most closely associated with AIDS (homosexual males, male and female sex workers, drug users, and citizens of third-world countries).

History of the Epidemic

While epidemiologists who study the origins of disease rely in part on documentation such as medical and autopsy reports, and material evidence such as serum and tissue samples, tracing the history of a disease ultimately requires a certain amount of speculation. In the case of the virus that causes AIDS (human immunodeficiency virus or HIV, first isolated in 1984), a preponderance of evidence suggests it originated among monkeys in western Africa, moving from simian to human populations perhaps as early as the mid-twentieth century. From there it was rapidly transmitted from human to human by means of infected bodily fluids such as blood, semen, or vaginal secretions.

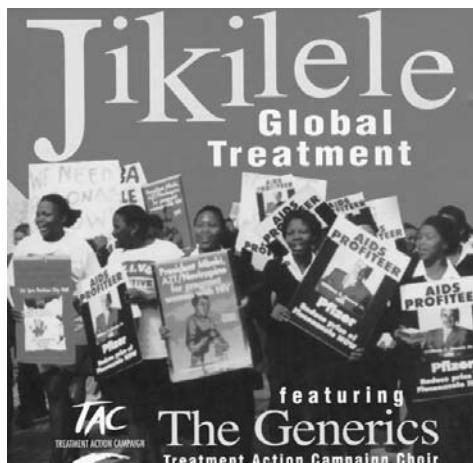
Increased travel between rural and urban Africa in the postcolonial period, as well as travel between Africa and Europe or the United States, helped spread the virus to the developed world. A number of aspects of modern society—including population mobility, relaxed sexual mores, intravenous drug use, and medical innovations like blood transfusion and organ transplantation—have facilitated the spread of HIV, which lives in the body for

an extended period before manifesting itself in opportunistic infections.

In the late 1970s, the first documented cases of the medical syndrome occurred among gay men in urban centers of the United States with large gay communities, chiefly Los Angeles, San Francisco, and New York. Official recognition of what would eventually be called AIDS was published by the Centers for Disease Control in June 1981. Physicians in France and England took note of these cases, which were comparable to their own clinical observations during the same period.

A syndrome rather than a disease, AIDS, unlike most bacteriological or viral infections, does not manifest itself in a single symptom or even a small cluster of symptoms. Instead, HIV attacks the cells responsible for the body's immunological defenses, making the body vulnerable to a wide range of common but normally unthreatening bacteriological and viral agents. Thus, in the early years of the epidemic, a clinical diagnosis occurred only after the appearance of secondary infections, making it difficult for physicians initially to recognize a pattern or even identify the causal agent and its presence in patients. Several years elapsed before a viral cause and a clinical test for antibodies were determined. Slow to cause the immunodeficiency that signaled its presence, HIV had ample opportunity to be spread by those who did not know they were infected. Unlike the causes of past epidemics such as plague, smallpox, or influenza, HIV could survive unnoticed in the infected for months or even years.

Historically, different cultures have responded to epi-



***Jikilele* is an album by the Generics, a choir composed of individuals working with the Treatment Action Campaign (TAC). The cover of this compact disc, recorded in 2001, depicts a TAC demonstration. TAC's main objective is to campaign for greater access to treatment for all South Africans, by raising public awareness and understanding about issues surrounding the availability, affordability, and use of HIV treatments. TAC campaigns against the view that AIDS is a death sentence.**

demical disease in remarkably similar ways. In the ancient and modern worlds, plagues have often been viewed as divine punishment for breaking taboos or committing sins. (For example, both Homer's *Iliad* and Sophocles' *Oedipus Rex* begin with such plague punishments.) Because AIDS was first documented among intravenous drug users, sex workers, and men who were having sex with men, these already stigmatized groups were regarded by many as undeserving of medical treatment, and the culturally or legally proscribed activities that served as modes of transmission were frequently left out of public discussion. Even today, more than twenty years into the epidemic, much of the debate about HIV-prevention training remains mired in conflicts over cultural and religious values rather than discussions about effective public health practices.

In addition, during an epidemic the unaffected can conclude either that only the marginalized group is vulnerable (in which case, no further action is required) or that everyone is vulnerable (so the marginalized group needs to be expelled or contained and regulated). Throughout the first two decades of the AIDS epidemic, governments and communities made both assumptions, in violation of standard public health practices. Heterosexuals in industrialized nations assumed AIDS was a homosexual problem. African-American clergy and leaders assumed it was a white problem. African leaders assumed it was a problem of former French, English, or Belgian colonizers and American hegemonic capitalists. Communist leaders in the People's Republic of China and the Soviet Union

Our lives begin to end the day we become silent about things that matter. • MARTIN LUTHER KING JR. (1929–1968)

assumed it was a decadent bourgeois problem. The result of this blindness was a lack of AIDS-prevention education and health monitoring worldwide, allowing infection rates to soar.

Recent Trends and Future Prospects

The end of the Cold War and the rise of a more tightly knit global economy have in many ways exacerbated the AIDS problem. Within the old Soviet bloc, the end of communism resulted in economic dislocation and hardship, which in turn increased the rates of poverty, intravenous drug use, and prostitution while reducing the capacity of socialized medicine to respond to the epidemic. Expanded trade in Africa and Asia similarly facilitated HIV transmission among marginalized or migratory workers. The rise of the Internet and the attendant proliferation of online pornography have resulted in new types of sex work as a form of economic subsistence. In addition, airline deregulation has encouraged Western sexual tourism in developing nations.

Furthermore, the development in recent years of effective pharmaceutical treatments to manage HIV infection has brought with it unintended consequences. In Western industrialized nations where such medications are available, some people have become lax about employing AIDS-prevention measures, and infection rates in some populations have risen. In developing nations where AIDS medications are prohibitively expensive, governments and nongovernmental organizations have had to lobby for reduced drug costs.

AIDS will continue to destabilize economically and politically vulnerable communities and countries until an HIV vaccine is developed. Research into a cure for AIDS continues apace; but until researchers develop an effective vaccine, AIDS-prevention education and a commitment by Western nations to provide funds for medical treatment will remain the primary means of limiting this epidemic.

Thomas L. Long

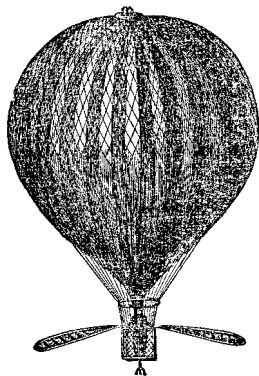
See also Diseases—Overview

Further Reading

- Boffin, T., & Gupta, S. (Eds.). (1990). *Ecstatic antibodies: Resisting the AIDS mythology*. London: Rivers Oram Press.
- Bullough, V. L., & Bullough, B. (1977). *Sin, sickness, and sanity: A history of sexual attitudes*. New York: New American Library.
- Clark, C. F. (1994). *AIDS and the arrow of pestilence*. Golden, CO: Fulcrum Publishing.
- Corless, I. B., & Pittman-Lindeman, M. (Eds.). (1989). *AIDS: Principles, practices, and politics. Series in death education, aging, and health care*. New York: Hemisphere Publishing Corp.
- Douglas, M. (1992). The self as risk-taker: A cultural theory of contagion in relation to AIDS. In *Risk and blame: Essays in cultural theory* (pp. 102–121). New York: Routledge.
- Fee, E., & Fox, D. M. (Eds.). (1988). *AIDS: The burdens of history*. Berkeley: University of California Press.
- Gilman, S. L. (1988). *Disease and representation: Images of illness from madness to AIDS*. Ithaca, NY: Cornell University Press.
- Grmek, M. D. (1990). *History of AIDS: Emergence and origin of a modern pandemic* (R. C. Maulitz & J. Duffin, Trans.). Princeton, NJ: Princeton University Press.
- Haver, W. (1996). *The body of this death: Historicity and sociality in the time of AIDS*. Stanford, CA: Stanford University Press.
- Jonsen, A. R., & Stryker, J. (Eds.). (1993). *The social impact of AIDS in the United States*. National Research Council. Washington, DC: National Academy Press.
- Klusacek, A., & Morrison, K. (Eds.). (1992). *A leap in the dark: AIDS, art, and contemporary cultures*. Montreal, Canada: Véhicule Press.
- Leavy, B. F. (1992). *To blight with plague: Studies in a literary theme*. New York: New York University Press.
- Long, T. L. (2004). *AIDS and American apocalypticism: The cultural semiotics of an epidemic*. New York: State University of New York Press.
- Lupton, D. (1994). Moral threats and dangerous desires: AIDS in the news media. *Social Aspects of AIDS Series*. London: Taylor & Francis.
- Mack, A. (Ed.). (1991). *In time of plagues: The history and social consequences of lethal epidemic disease*. New York: New York University Press.
- Shilts, R. (1987). *And the band played on: Politics, people, and the AIDS epidemic*. New York: St. Martin's Press.
- UNAIDS: *The Joint United Nations Programme on HIV/AIDS*. Retrieved July 25, 2004, from <http://www.unaids.org/en/>
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. *National Center for HIV, STD and TB Prevention*. Retrieved July 25, 2004, from <http://www.cdc.gov/nchstp/od/nchstp.html>

Airplane

Wilbur and Orville Wright are credited with inventing the airplane in 1903. What separated the brothers from all those before them who tried to build such a craft was, simply, that the Wright airplane was capable of sustained, powered, and controlled flight. Air



The balloon of Vincent Lunardi, which he launched in London, England in September 1784, thereby introducing ballooning to England.

passing over a wing generated lift, while surfaces on the craft manipulated some of the air, providing directional control—all of this sustained by an engine that provided thrust.

For the next eleven years the airplane was a solution in search of a problem: No one seemed to know what to do with it. Even at the start of World War I, aviation's potential remained unclear—at least to the generals. But its flexibility soon became apparent, and the airplane found many roles in the war: air-to-air fighter, bomber, and observation platform.

War often leads to rapid technological advances. At the start of World War I most airplanes were at least biplanes—two wings—and were built of wood and fabric. Yet by war's end the Fokker company was producing airplanes with welded steel truss fuselages, while the Junkers company built monoplanes made entirely of metal. Speed, range, and reliability increased as well. And while the first four-engine airplane predated the war (Russian designer Igor Sikorsky's *Russky Vitaz*), multiengine bombers of colossal size were fairly common by the end of it.

The Interwar Years—Dawn of Commercial Aviation

In the period between the two world wars aviation's commercial potential blossomed. Not only did planes fly passengers, they carried freight, mail, entertainers, and explorers. At the same time the airplane's use expanded from within the industrialized world to encompass the entire globe.

Europeans were the first to establish regular, lasting commercial aviation. Many of the large, multiengine airplanes that survived the war were modified to carry passengers. Using these, several European nations established national airlines offering service within the continent. Still possessing colonies around the world, these powers saw the airplane as a fast way to move people to and from their possessions. They subsidized the airlines because they were flagships—demonstrations of prestige and power—

and because without the subsidy the airlines would have gone bankrupt.

By contrast, the United States was more restrained about direct government subsidies for commercial ventures; lacking a major sponsor, the airplane remained something of an orphan. The U.S. government did offer financial support through the airmail system, and private companies flew the airmail and an occasional paying passenger, but little effort was made to cater to passenger traffic. A pivotal moment for aviation came in 1930 with the restructuring of the method by which companies were paid for the mail they carried. Rather than paying strictly by the weight of the mail, the new formula factored in internal volume. This spurred aircraft manufacturers to design new and larger planes able to carry passengers in enclosed cabins. Although the ruling applied only in the United States, it had ramifications the world over, for it led to the modern commercial airliner.

The airplane demonstrated its value in less developed parts of the world as well. Companies in South America employed single-engine airplanes such as the Junkers F-12 to reach remote outposts, while French Latecoeres carried mail from Europe down the west coast of Africa, and even across the Atlantic to Brazil.

Technological Developments

Although wood as an aircraft construction material had a long tradition, metal as an aircraft material grew in both popularity and use. This stemmed from several things: new knowledge about the properties of metal; new alloys; cultural embrace of a new material (such as duralumin) in place of an old one (wood); and aircraft accidents blamed on a failed wooden components.

The development of the stressed-skin (monocoque) fuselage increased the useful internal volume of the aircraft. A monocoque fuselage is a shell in which the loads carried by the aircraft in flight are borne by the fuselage's skin. (An aluminum or composite canoe is an example of a monocoque shell.)

First proposed by a Frenchman in 1871, the idea of a variable-pitch propeller was impractical until aircraft rou-

**The German Zeppelin VII,
which crashed in June 1910.**

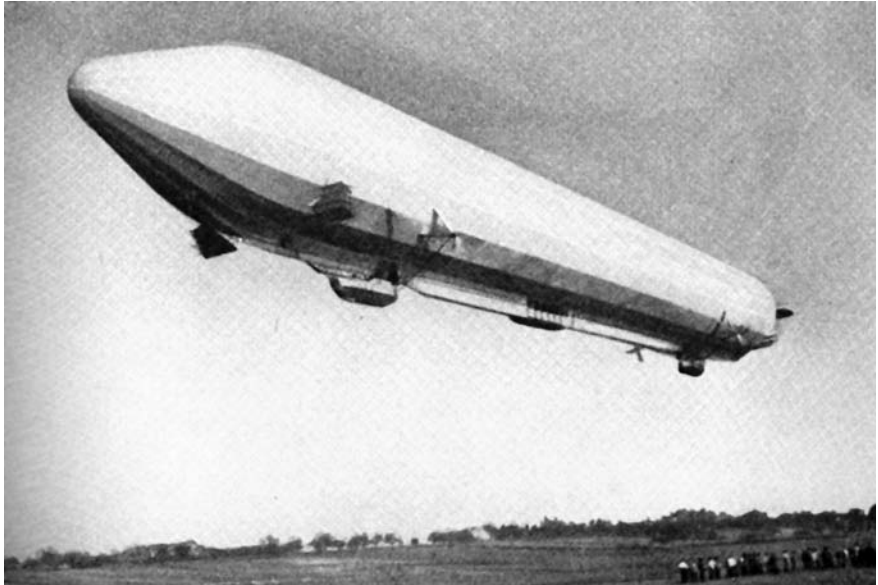
tinely operated at more than 300 kilometers per hour; below that speed a fixed-pitch propeller performs well. The effect of changing the propeller's pitch—the angle at which the blade meets the air—is not unlike having gears on a bicycle.

Researchers found that shrouding the engine with a cowl would provide both better cooling (most engines at the time were air-cooled) and lower drag. This last item translated into higher efficiency and greater speed, and manufacturers worldwide quickly adopted the cowling.

In addition to ground-based weather stations set up to inform airborne traffic of conditions en route, new navigation instruments to assist pilots in finding their way in clouds became available in the 1930s. These included radio navigation, which allowed a pilot to follow a course without any visual references, and gyroscopes. The ability to navigate without visual references outside the aircraft was known as "blind flying" or "instrument flight."

In 1930 the Englishman Frank Whittle patented his idea for an aircraft turbine engine. Not long after he received his patent, Hans Joachim Pabst von Ohain, a German aeronautical engineer, conceived and designed his own turbine engine, independent of Whittle's efforts. Whittle was the first to operate a gas turbine aircraft engine, in 1937, but von Ohain's design was the first to actually power an airplane, when it carried an HE 178 into the air in 1939. Both British and German turbojet aircraft saw military service during World War II, but they came too late to prove effectual.

While these technological developments increased the reliability and practicality of airplanes, water remained the preferred landing surface for most long-distance aircraft. This was because land-based runways entailed construction and upkeep costs, whereas water did not, and seven-tenths of the earth's surface is water, affording almost limitless and free runways. Possessing numerous colonies around the globe, European nations found the airplane in general, and the seaplane in particular, the



ideal means to establish quick access to other parts of the world. Great Britain led the way, with its large fleet of seaplanes crisscrossing the globe, carrying passengers and mail to Africa, Asia, and South America.

These and other developments came during a period in which there was little widespread public support for aviation: As often as not, aviation appeared more a sport than a practical pursuit, and it was uncommonly dangerous. And ironically, many of the technological advances came during a worldwide economic depression. Much of the push for these developments came from governments willing to support the fledgling technology for its potential, even while the marketplace remained skeptical about its value. This support usually came in the form of military funding, which, in the United States, kept several aircraft companies from failing.

In World War II the airplane was used in much the same way as it had been in World War I: as freighter, strategic and tactical bomber, long-distance fighter, observation platform, and ground attack machine. One of the few dramatic evolutions was in naval aviation: World War II introduced the airplane as a potent naval weapon flying from floating airports (aircraft carriers). And once again, war led to accelerated technological developments, including the adoption of autopilots, instrument landing systems, turbo-supercharged intercooled engines of extraordinary power and complexity, and the first ejection seats for aircraft. In spite of the similarities in the airplane's use during the two world wars (a sign of a maturing technology), there were notable differences, among

The saying “Getting there is half the fun” became obsolete with the advent of commercial airlines. • HENRY J. TILLMAN

them the sheer number of airplanes produced for military use, and their capabilities. Both the Americans and the British, for example, regularly sent more than a thousand bombers on a single mission, each carrying several tons of bombs. The Boeing B-29 had a range approaching 6,500 kilometers and bomb payload of 10 tons. Even fighters could fly nearly 2,000 kilometers with additional fuel tanks.

With its extensive wartime use, the airplane’s reliability ceased to be a major concern. Additionally, since most aircraft in the period had flown from land-based airfields, new airports dotted the land. These new airports, coupled with improved engines and greater endurance, spelled the end of the era of flying boats, once the mainstay of international airlines.

Postwar Aviation

Of the wartime developments, the turbine engine has had the greatest impact, for it dramatically increased the speed at which aircraft can fly. But researchers found that as airplanes approached the speed of sound (Mach 1) they encountered compressibility. As an airplane approaches Mach 1 it compresses the air in front of it, creating shock waves that cause a number of problems, chief among them control. A swept wing, with an angle of 35 degrees or more, delayed this compression and reduced the control problems.

TECHNOLOGICAL DEVELOPMENTS

Flying at supersonic speeds—exceeding Mach 1—was the holy grail of the aviation community. Solving the control issues associated with compressibility enabled the X-1 to exceed Mach 1, in 1947. This success led to true supersonic aircraft, almost all of which were and are built for military use. Two different types of supersonic airliners were built, but they proved too expensive to remain in service.

With the maturation of the airplane’s shape and power, the next major development was the systems revolution: the advent of computerized control of aircraft and their systems in place of direct human and mechanical control. Unmanned aerial vehicles, or UAVs, enabled

by the systems revolution, are the next step—aircraft that fly autonomously or are controlled by a pilot on the ground.

Computers, once rare, are now almost ubiquitous on modern aircraft, controlling or monitoring nearly everything related to flight. Linked to a network of satellites in the Global Positioning System (GPS), they enable one to navigate with remarkable precision and locate oneself anywhere in the world within a few meters or less. A network of satellites provides the GPS, enabling one to navigate with remarkable precision and locate oneself anywhere in the world within a few meters or less.

COMMERCIAL AVIATION

Following the end of World War II the British had the greatest technological lead with turbine engines. Their De Havilland DH 106 *Comet* entered service in 1952, the world’s first pure jet airliner. That decade saw a number of other jet airliners come to market as well, including the Soviet Tupolev Tu-104, the Boeing 707, the Douglas DC-8, and the Sud Aviation *Caravelle*. Unlike its competitors, the twin-engine *Caravelle* was built with an entirely new idea in mind—short-distance flights between smaller cities, rather than long-distance and even intercontinental flights that best suited the larger, four-engine aircraft. The *Caravelle* pioneered an entire category of commercial aircraft—the short-haul airliner. In all this, flying remained an exclusive, expensive, and fairly uncommon activity. Economy of scale forced a gradual change, however, and commercial airliners grew in size or squeezed more seats into the same space, lowering ticket prices. Once luxurious machines resembling first-class rail cars in their accommodations, airliners increasingly mimicked buses. This change was typified by the Boeing 747, the largest airliner available in 1970, which was so large it had two decks.

SOCIAL IMPACT

In 1927 Charles Lindbergh flew from New York to Paris, claiming the Orteig Prize offered for the first nonstop flight between the two cities. Lindbergh’s impact was far from simple record setting: His success convinced many

that aviation was more than a lark. One measure of his impact was the jump in air passengers in the years immediately following his flight. Insignificant in numbers before Lindbergh flew the Atlantic, airline ridership in the United States surged from 12,594 in 1927 to 52,934 in 1928. By the end of the twentieth century, jet-powered airliners had become the mainstay of commercial service worldwide, capable of great speeds (nearly 1,000 kilometers per hour in many instances) and range. These flying behemoths can ferry five hundred passengers at once from place to place, and their efficiency has had a dramatic effect on human mobility. Every year millions of people around the world fly thousands of miles in mere hours for both work and pleasure. In 2004, for example, in the month of March alone, commercial airlines worldwide carried 170.8 million passengers. Travel, once a luxury reserved for the wealthy who had the time and the money for a journey, is now accessible to an extraordinary swath of people. Almost no place on the planet is inaccessible, thanks to the airplane's ability to deliver anyone to any destination quickly.

Christian Gelzer

See also Exploration, Space; Transportation—Overview; Warfare, Air

Further Reading

- Bureau of Transportation Statistics website. Retrieved July 1, 2004, from <http://www.bts.gov>
- Constant, E. W. (1980). *The origin of the turbojet revolution*. Baltimore: Johns Hopkins University Press.
- Corn, J. J. (2002). *The winged gospel: America's romance with aviation*. Baltimore: Johns Hopkins University Press.
- Gorn, M. H. (2001). *Expanding the envelope: Flight research at NACA and NASA*. Lexington: University Press of Kentucky.
- Klemin, A. (1929, October). American passenger air transport. *Scientific American*, 141, 325.
- Komons, N. A. (1989). *Bonfires to beacons: Federal civil aviation policy under the air commerce act, 1926–1938*. Washington, DC: Smithsonian Institution Press.
- Miller, R., & Sawers, D. (1968). *The technical development of modern aviation*. London: Routledge & Kegan Paul.
- Schatzberg, E. (1994, January). Ideology and technical choice: The decline of the wooden airplane in the United States, 1920–1945. *Technology and Culture*, 34–69.
- Singer, B. (2003). *Like sex with gods: An unorthodox history of flying*. College Station: Texas A&M University Press.

- Tomayko, J. E. (2000). *Computers take flight: A history of NASA's pioneering digital fly-by-wire project*. (NASA Publication SP-2000-4224). Washington, DC: National Aeronautics and Space Administration.
- Trimble, W. F. (1995). *From airships to airbus: The history of civil and commercial aviation*. Washington, DC: Smithsonian Institution Press.

Akbar

(1542–1605)

RULER OF MUGHAL INDIA

Abu-ul-Fath Jalal-ud-Din Muhammad Akbar was the greatest emperor of the South Asia-based Mughal dynasty (1526–1857). Over the course of a forty-nine-year reign (1556–1605), Akbar proved himself a brilliant general, shrewd politician, able administrator, and generous patron of the arts. Akbar's energy and acumen placed the Mughal empire on firm foundations and created a template for Mughal imperial governance that survived almost unchanged until the early eighteenth century.

Born in 1542 in Umarkot in Sind (in present-day southeastern Pakistan), Akbar was thirteen years old when he succeeded to the imperial throne following the premature death of his father, Humayun (1508–1556). Over the next four years, Akbar slowly extended his political control across Hindustan—the geographical and agrarian heartland of northern India. In the 1560s Akbar asserted his authority over the regions of Malwa (1561), Gondwana (1564), Rajasthan (1568–69), and Bundelkhand (1569) in central and northern India. In the following decades, his military campaigns extended imperial rule to Gujarat (1572–1573) in the west, Bihar and Bengal (1574–1576) in the east, Kabul (1585, in present-day Afghanistan), Kashmir (1586), Sind (1591), and Orissa (1592) in the southeast, Makran and Baluchistan (1594, in present-day Pakistan), Kandahar (1595, in present-day Afghanistan), and Berar, Khandesh, and parts of Ahmadnagar (1595–1601) in the Deccan.

Akbar's expansionist military goals found a complement in equally vigorous attempts to co-opt or destroy alternative loci of power. Thus, between the early 1560s and 1581, Akbar succeeded in crushing a host of rivals



The Mughal Emperor Akbar.

(rank) that comprised two separate grades: The first denoted a nobleman's personal status and the second indicated his obligation to recruit and command a certain number of cavalry for imperial service. A *mansab* holder's financial needs were satisfied by the state through assignments of nonhereditary and nontransferable land grants that were rarely retained for more than three years.

Akbar targeted the powerful Islamic religious establishment after the 1570s. He did this in several moves: He reformed the system of state-issued land grants that provided the religious community with financial support; he asserted his own power of judgment over doctrinal decisions and diminished the importance of the head of the judiciary—who usually also served as chief spokesperson for the religious establishment—within the Mughal administrative framework. He exiled—and occasionally murdered—religious opponents and promoted the Sufi orders as a counterpoint to the orthodox religious establishment. He also evolved a theory of universal kingship that obligated the emperor to favor all his subjects equally, regardless of their

religious affiliation. Accordingly, Akbar ended the practice of forcibly converting non-Muslim prisoners of war to Islam and lifted various discriminatory taxes on Hindus; his most significant gesture came in 1579 when he abolished the poll tax, or *jizya*, on non-Muslims. Although the Islamic establishment generally opposed Akbar's religious initiatives, it was forced to accept the new dispensation after a massive religio-political revolt against Akbar was crushed in 1581. Akbar's reformist agenda largely survived until its reversal during the reign of his great-grandson, Aurangzeb (reigned 1658–1707).

within his own extended Mughal clan. Among them were the distantly related Mirzas (early 1560s) and his half-brother, Mirza Hakim (1581). Akbar also asserted his power over the fractious Mughal nobility in a multi-pronged process that unfolded between the 1560s and the 1590s. He broke the power of entrenched Turkish and Uzbek clans that served under his father; diversified the ranks of the Mughal nobility by recruiting from alternate groups such as Indian Muslims, (Hindu) Rajputs, Afghans, and Persians; fashioned elaborate rules of conduct emphasizing discipline and loyalty to the Mughal dynasty; and emphasized both his divinely ordained right to rule and (more controversially) his own semidivine status. The most important tool in Akbar's attempts to control the nobility, however, was the *mansabdari* system implemented after 1574–1575. Within the *mansabdari* system every nobleman was assigned a *mansab*

After the 1560s Akbar moved to transform the *zamindars* (superior landholders) into a quasi-official service class. Control over the *zamindars* was important to Akbar as they gave him access to the agrarian wealth that paid for the Mughal imperial enterprise. The *zamindars* were notoriously refractory, and gaining their monies

invariably involved time-consuming political negotiations, but Akbar crafted a new arrangement. He had the *zamindars* collect from the peasants the required revenue—which the state determined through a highly sophisticated system of measuring cultivated lands and calculating average prices and yields over the previous ten years—in return for which service the *zamindars* retained their claim over the land and between 10 and 25 percent of the revenue they collected. The presence of imperial revenue officials, accountants, and Mughal military contingents in the countryside provided a crucial check on the ability of *zamindars* to obstruct the will of the Mughal state.

Besides remarkable military and political achievements, Akbar's reign witnessed tremendous cultural and artistic accomplishments. Massive imperial patronage for Persian poetry, historical writing, and translations of Hindu scriptures into Persian were accompanied by the creation of new schools of art and architecture that successfully blended Persian and Indic styles, techniques, and themes. Some of the finest examples of Mughal miniature painting (like the illustrations for the *Akbar-nama*) and architecture (seen in Akbar's short-lived imperial capital at Fatehpur Sikri) date to this period. The long-lasting influence of Mughal art and architecture is best attested by the continuing attempts in South Asia to emulate their fine sense of balance and proportion long after the Mughal dynasty had collapsed in the early 1700s.

Akbar's last years were clouded by the rebellion of his eldest and formerly favorite son, Salim, between 1599 and 1604. Ultimately, their partial reconciliation paved the way for the succession of Salim—as Emperor Jahangir—following Akbar's death in October 1605.

Munis D. Faruqi

See also Mughal Empire

Further Reading

Habib, I. (Ed.). (1997). *Akbar and his India*. New Delhi, India: Oxford University Press.

Habib, I. (1999). *The agrarian system of Mughal India*. New Delhi, India: Oxford University Press.

Khan, I. A. (1973). *The political biography of a Mughal noble: Mun'im Khan Khan-i Khanan*. Delhi, India: Munshiram Manoharlal Publishers.

Khan, I. A. (Ed.). (1999). *Akbar and his age*. New Delhi, India: Northern Book Centre.

Nizami, K. A. (1989). *Akbar and religion*. Delhi, India: Idarah-i-Adabiyat-i-Delli.

Richards, J. F. (1993). *The Mughal empire*. Cambridge, UK: Cambridge University Press.

Rizvi, S., & Abbas, A. (1975). *The religious and intellectual history of the Muslims in Akbar's reign*. New Delhi, India: Munshiram Manoharlal Publishers.

Streusand, D. E. (1989). *The formation of the Mughal empire*. New Delhi, India: Oxford University Press.

Aksum

Aksum was the capital of an important kingdom in northeast Africa during the first millennium CE. It was also the religious center of the earliest Christian state in Africa. At the peak of its power in the fourth and fifth centuries, Aksum ruled an empire that extended from Cush in the modern Republic of Sudan to Saba (Sheba) in Yemen and included much of contemporary Ethiopia, Eritrea, and Somalia. It is understandable, therefore, that the third-century Iranian religious leader Mani ranked Aksum with Rome, Persia, and China as one of the four great empires that divided the inhabited world among them.

Sources of Aksumite History

Although Ethiopia has an extensive literature, it provides little information about historical Aksum, emphasizing instead the legend that the kings of medieval and modern Ethiopia were the lineal descendants of Menelek (late tenth century BCE), the son of King Solomon and the Queen of Sheba, who reigned at Aksum until being exiled by usurpers in the early Middle Ages. The principal sources for the history of ancient Aksum, therefore, are Aksumite royal inscriptions and coins, references to Aksum in ancient classical and Christian literature, Sabaeen inscriptions, and archaeology. The most important of these sources are the royal inscriptions, which

Key Events in the History of African States

8TH CENTURY BCE	Cush (in southern Egypt and northern Sudan) invades and conquers Egypt; Shabaka of Cush establishes Egypt's twenty-fifth dynasty.
6TH CENTURY BCE	Meroë becomes the capital of Cush.
1ST MILLEN- NIUM CE	Wagadu (Ghana) empire flourishes.
1ST-3RD CENTURY CE	Kingdom of Cush flourishes, engages in trade with Rome.
MID-3RD CENTURY CE	Aksum replaces Cush as principal supplier of goods to Rome.
EARLY 6TH CENTURY CE	Aksum loses its Nile Valley and southern Arabian provinces.
6TH CENTURY	Nubian kingdoms (Nobadia, Makuria, and Alodia) flourish.
8TH CENTURY	City of Aksum abandoned.
9TH-14TH CENTURY	Centralization of political power in central Africa leads to the formation of the kingdom of Kongo.
10TH-12TH CENTURY	Hausa states emerge.
c. 1150-EARLY 14TH CENTURY	Saifawa dynasty rules in Kanem, in the Lake Chad basin.
EARLY 13TH CENTURY	Wagadu reduced to a tribute-paying vassal of Soso and Mali.
13TH CENTURY	Nubian kingdom of Alodia begins to disintegrate.
13TH-14TH CENTURY	Loose alliance among the seven Hausa states.
MID-13TH- MID-15TH CENTURY	Mali empire flourishes on the Upper Niger River.
1290-1450	Great Zimbabwe flourishes in southern Africa.
15TH CENTURY	Empire of Songhai is expanding.
15TH CENTURY	The East African island of Kilwa is a leading trading center.
1591	Songhai loses its independence to invaders from Morocco.
17TH-18TH CENTURY	Bornu, in the Lake Chad basin, is one of the largest states in Africa.
1808-1903	Sokoto caliphate flourishes in West Africa.
1818-1879	Zulu kingdom flourishes.



Aksumite kings set up to commemorate their victories. These inscriptions are written in Greek and two Semitic languages—Geez and Sabaean—and provide important information about Aksumite government and foreign relations. Aksum also issued the earliest native African coinage, which provides the only evidence for the existence of several Aksumite kings. In addition, classical and Christian literature frequently mentions Aksum because of the important role it played in late Roman and early Byzantine foreign policy and commerce in the Red Sea basin. After Aksum ceased to be the royal capital in the early Middle Ages, the city fell into ruin. Archaeological exploration of the ruins of Aksum, which began only in the twentieth century, is providing important evidence for the origins and early history of the city.

Aksum and Its Neighbors

The early history of Aksum is obscure. Although there is archaeological evidence for incipient state formation in Ethiopia as early as the third millennium BCE, the origins of the Aksumite state date to the first half of the first millennium BCE, when Sabaean colonists settled in Eritrea and northern Ethiopia. Sabaean inscriptions and monumental architecture and sculpture attest to the emergence of several kingdoms in the region. Aksumite history proper begins when the rulers of one of these states, the Habasha (or Abyssinians), made Aksum their capital, probably in the first century BCE or the first half of the first century CE, when classical sources refer to the city as a royal capital and important trading center.

Geography was the key to Aksum's growth. Its location high on the Ethiopian plateau gave it ready access to the upper Nile Valley and its hinterlands on the west and to the Red Sea on the east and enabled Aksum to profit from its position astride the trade routes that linked Roman Egypt to northeastern Africa, southern Arabia, and especially India. By the late first century CE, Aksum was the chief commercial center of the southern Red Sea basin. The fact that its ruler at that time was literate in Greek combined with the presence of resident foreign traders in Aksumite territory attests to the existence already of close ties between Aksum and Roman Egypt. Aksumite power

grew rapidly thereafter. By the mid-third century Aksum had displaced Cush as the principal supplier of African goods to Rome. With the conquest of Cush and the destruction of its capital, Meroë, by the mid-fourth-century king Ezana, Aksumite territory reached its maximum extent. Ezana's conversion to Christianity also strengthened Aksum's ties to Rome, and for the next three centuries Aksum was Rome's principal ally in the struggle to prevent the expansion of Sasanid Persian influence in southern Arabia.

Government and Culture

Little is known about how the Aksumites governed their empire. Aksumite kings styled themselves "king of kings" and listed numerous peoples they claimed to rule in their titularies. Combined with references to various local rulers in their inscriptions, this suggests that the king of Aksum and his family controlled the central government and military, while local royal families continued to rule





A stylized drawing from the 1800s of the ruins of a palace at Aksum.

the empire's various provinces. The frequent references to rebellions in the sources highlight the difficulties of controlling such a vast and decentralized state. By the early sixth century Aksum had lost its frontier provinces in the Nile Valley and South Arabia, although control of its Ethiopian and Eritrean core territories remained firm. Aksumite prosperity depended, however, on its key role in the lucrative Red Sea and Indian Ocean trade. The disruption of that trade by the Arab conquest of Egypt as well as Syria, Lebanon, Israel, Jordan, Iraq, and Iran sapped Aksum's prosperity and resulted in the gradual decline and ultimate abandonment of the city in the eighth century, when its last kings moved their capital to a more defensible site in the interior of Ethiopia.

Aksum flourished for over half a millennium, producing a rich culture that created in the great stelae of Aksum some of the most spectacular monuments of the ancient world. Unfortunately, little is known about other aspects of Aksumite culture. Christianity has been the dominant religion of Ethiopia since the mid-fourth century. Conversion to Christianity was, however, followed by repudiation of many of the pagan traditions of Aksum. Thus, although the Geez translation of the Bible and the trilingual royal inscriptions clearly indicate that pre-Christian Aksum had a literary tradition, no Aksumite literature survives. (It is thought that in the abandonment of Aksum as the royal capital, the early manuscripts were lost.) Likewise, only a small amount of Aksumite art, predominantly architectural and numismatic, still exists.

Archaeological evidence indicates that Aksumite culture was a blend of African, Mediterranean, and southern Arabian traditions in which the southern Arabian strand dominated. Thus, the official language of Aksum was Geez, a Semitic language, which was written in an alpha-

betic script derived from South Arabia. Aksumite architecture followed South Arabian models and the kings of Aksum applied South Arabian hydraulic engineering techniques to ensure a reliable water supply for Aksum. The Aksumites also worshipped South Arabian gods. The most important of these gods was

Mahrem, the war god, who was reputed to be the ancestor of the kings and their helper in battle. Presumably, much Aksumite tradition survives in the Christian culture of medieval and modern Ethiopia, but at present such survivals cannot be identified with certainty.

Stanley M. Burstein

Further Reading

- Burstein, S. (1998). *Ancient African civilizations: Kush and Aksum*. Princeton, NJ: Markus Wiener Publishers.
- Casson, L. (1984). *Ancient trade and society*. Detroit, MI: Wayne State University Press.
- Casson, L. (1989). *The Periplus Maris Erythraei*. Princeton, NJ: Princeton University Press.
- Connah, G. (2001). *African civilizations: An archaeological perspective* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Kobishchanov, Y. M. (1979). *Aksum*. University Park, PA: Pennsylvania State University Press.
- Munro-Hay, S. (1991). *Aksum: An African civilization of late antiquity*. Edinburgh, UK: Edinburgh University Press.
- Phillipson, D. W. (1998). *Ancient Ethiopia: Aksum, its antecedents and successors*. London: The British Museum Press.
- Schippmann, K. (2001). *Ancient South Arabia: From the queen of Sheba to the advent of Islam*. Princeton, NJ: Markus Wiener Publishers.
- Sidebotham, S. E. (1986). *Roman economic policy in the Erythra Thalassa, 30 BC-AD 217*. Leiden, Netherlands: Brill.
- Young, G. K. (2001). *Rome's eastern trade: International commerce and imperial policy, 31 BC-AD 305*. London: Routledge.

Alchemy

As it is most commonly understood, alchemy was a medieval scientific and philosophical endeavor with the central practical aim of finding a method for transforming base metals into gold. The primitive exercises in chemistry, however, were only the practical manifesta-

*You are an alchemist; make gold
of that.* • WILLIAM SHAKESPEARE
(1564–1616)

tions of a more ancient, quasireligious search for what might be termed the fountain of youth: The alchemist's ultimate quest was to uncover the secrets of matter and of life itself, so that it might be prolonged indefinitely.

Alchemy has long been of interest to historians of science, anthropologists, and a host of other scholars with an interest in the human religious impulse and its shaping of rituals aimed at the transformation of individuals and social groups. It is a topic perhaps best approached from four distinct avenues of inquiry: The first has to do with the etymology of the word; the second concerns its history; the third focuses on both the practice of alchemy and its ideological foundations; the fourth deals with alchemy as a global phenomenon with a set of universal precepts identifiable through cross-cultural comparison. The story of alchemy must, in sum, be understood from a highly nuanced standpoint that takes into account its complex history and global diffusion. More than just a simple precursor of the modern science of chemistry, it is a way of thinking about the relationship of humanity and nature that emphasizes the importance of transformation in both. It also focuses on the role that human agency plays in mediating the processes by which substances—natural and human—are *transmuted*, or raised to a higher form.

The word *alchemy* enters the English language by way of a long philological journey that parallels, in some respects, the evolution of the practice in the Western world. Its semantic core comes from one of two possible Greek terms: The first, *chymeia*, is a noun denoting something poured or infused. The second, *chêmeia*, is a noun that refers specifically to the transformation of metallic substances. One or the other of these terms was likely the source for the Arabic term *al-kîmiyâ*, which comes into the lexicon of Medieval Latin as *alchimia*, into Old French as *alkemie*, and ultimately into English as *alchemy*.

This linguistic evolution provides some clues as to the origin and spread of the art in Greece, Northern Africa, and the Near East. Its first flowering is believed to have been in Egypt around 300 BCE, a time when scientific inquiry was in full bloom in the Hellenistic world. Some

Francis Bacon on The Making of Gold

Let there be a *Small Furnace* made, of a *Temperate Heat*; Let the *Heat* be such, as may keep the *Metall perpetually Moulten*, and no more; For that above all importeth to the Work. For the Material, take *Silver*, which is the *Metall* that in Nature Symbolizeth most with *Gold*; Put in also, with the *Silver*, a Tenth Part of *Quick-silver*, and Twelfth Part of *Nitre*, by weight; Both these to quicken and open the Body of the *Metall*: And so let the Worke be continued by the *Space of Sixe Monthes*, at the least. I wish also, that there be, at some times, an Injection of some *Oyled Substance*; such as they use in Recovering of *Gold*, which by Vexing with Separations hath beene made Churlish: And this is, to lay the Parts more Close and Smooth, which is the Maine Work. For *Gold* (as we see) is the Closest (and therefore the Heaviest) of *Metalls*: And is likewise the most Flexible and Tensible. Note, that to thinke to make *Gold* of *Quick-silver*, because it is the heaviest, is a Thing not to bee hoped; For *Quick-silver* will not endure the Mannage of the *Fire*. Next to *Silver*, I thinke *Copper* were fittest to bee the *Materiall*.

Source: Bacon, F. (1627). *Century IV of Sylva Sylvarum, or a Naturall Historie in ten Centuries*. London.

four and a half centuries later, Islamic scholars adopted the tradition and added to its cosmological conceptions, precepts, and practices; ultimately, it was their stewardship and mediation that enabled it to spread throughout Europe in the fourteenth century CE. Although considered of questionable merit at best by Christian ecclesiastical authorities, alchemy had become a vital part of the European intellectual ethos by the sixteenth and seventeenth centuries. Many of history's well-known personalities, including, in England, Sir Walter Raleigh, Sir Isaac Newton, and King Charles II, have been favorably inclined toward its esoteric and exoteric dimensions.

Moreover, the symbolism of alchemy has had a profound impact on the literary and artistic traditions of the West. Evidence of its influence can be seen in the work of William Shakespeare, John Milton, Johann von

Marsilio Ficino on the Philosopher's Stone

Treats of what the philosophers stone is, and discourses first of its first part.

And because the philosophers had so obscurely set forth this science in strange involvings of words and shadows of figures, the stone of the philosophers was doubted by a very many men. Which it is of what things made? But if you will mind diligently, we divide the stone into two parts. The first part we say is terrestrial Sol, wherein both the ancient philosophers and the more modern do plainly agree with me in their testimonies in the Turba. Without terrestrial Sol the physical work is not perfected. Since they all assert that there is no true tincture without their Æs brass because in that there is the most pure sulphur of the wise, in which sage Nature contains her seed. And as the sun diffuses and darts down most lively

and penetrating rays on this elementary world: So the stone of the philosophers being by a physical operation made out of gold, the son, as I may say, of the sun, disperses itself into other metals, and will forever equalize them to himself in virtue, color, and weight. And because all metals, we deservedly take gold before others. For since we would make gold and silver, it is necessary to take the same. Man is generated out of man, a tree from a tree, and herb produces an herb, and a lion a lion; since each thing according to the temper of its nature, which they call the completion, generates and produces its like. Yet the philosophers more truly do not make gold or silver, but Nature cleansed by the skill of the operator.

Source: Ficinus, M. (1702). *Liber de Arte Chemica. Theatrum Chemicum, Vol 2* (J. von Budjoss, Transcr.). Geneva.

Goethe, John Dryden, Victor Hugo, and William Butler Yeats. Alchemical processes and symbolism have proved to be of enduring interest to scholars, artists, and literati down to the present era. In the twentieth century, they provided the brilliant psychologist Carl Jung with a template for understanding the processes associated with the maturation of the human psyche, and they continue to inform the work of many contemporary Jungian psychoanalysts. The alchemical quest for the so-called philosopher's stone (the substance that would change metal into gold, emblematic of that which is primal and in a state of eternal stasis) and elixir vitae (the potion that bestows boundless health and everlasting life) remains an inspiration to modern religious seekers, some of whom see in them guideposts for the human quest for communion with nature and the supernatural.

Alchemy can be described as a cosmological, philosophical, and metaphysical system that views the created world and everything in it as both vibrant and evolving. For the alchemist, the developmental processes that govern life are not easily discernible without the aid of special insight; it is the aim of alchemy to uncover and chart these hidden dynamics. By so doing, the alchemist would gain the knowledge that makes effective stewardship of the world possible. This includes not simply the ability to be a passive guardian, but the skills needed to engage in

proactive intervention that can bring all that has not reached maturation to full flower. Thus, the alchemist is one who understands the processes of nature at an intimate level and has the capacity to use this knowledge to promote cosmic, environmental, social, and individual metamorphosis.

The stock-in-trade of alchemy consisted of observation, the gathering of empirical data, experimentation, and contemplation of the unseen verities that lay behind the phenomena that could be apprehended with the five human senses. Whether couched in terms adapted from Egyptian, Greco-Roman, Islamic, Indian, Taoist, or Christian lore, the overarching goal of alchemy appears to have been relatively uniform: that is, to uncover the forces governing unity, diversity, stasis, and flux in the world. Having mastered them, the alchemist would possess knowledge of the primal element from which all matter was created and the ability to distinguish between the mutable and the immutable, the finite and the infinite.

In time, the art would develop two distinct trajectories. The first was limited to the study of natural processes (chemistry). The second—consisting of alchemy and the allied hermetic disciplines—would be concerned primarily with the esoteric and spiritual dimensions of these processes. In the alchemical lore of the West, the practice is often characterized as a quest for the substance that has

*If by fire Of sooty coal th' empiric alchymist Can turn, or holds it possible to turn,
Metals of drossiest ore to perfect gold.* • JOHN MILTON (1608–1674)

the power to perfect that which is incomplete and make noble that which is base. This element or compound is superior to and prized above all others. It is known by many names, the most famous of which is the *philosopher's stone*. In order to produce it, base matter—whether animal, vegetable, or mineral—must be reduced to *materia prima* (the primary substance). This symbolic death is the precursor for the generation of a new element through coagulation. The process was understood to involve internal and external dimensions, in that an alteration in the alchemist's state of consciousness was expected to accompany the manipulation of physical elements.

A more precise description of the aims, underlying philosophy, and processes associated with alchemy is difficult. Many of the texts produced by its practitioners are written in a manner that veils this information in allegories and symbols, a strategy intended to conceal its secrets from all save those who had been initiated into its mysteries. Some treatises appear to employ an alchemical language consisting of commonly shared and easily intelligible images; these include the biblical flood (symbolizing dissolution), the pelican (symbolizing the instrument used to distill the *elixir vitae*), the phoenix (symbolizing rebirth), blood (symbolizing mercury as solvent), the egg (the matrix in which the philosopher's stone is made), and the philosophical tree (emblematic of growth and the alchemical process). Other writers appear to delight in confronting the reader with a confusing array of polyvalent symbols that defy precise classification and bedevil would-be interpreters. Certain alchemical writings remain today virtually inscrutable to even the most highly trained specialists.

Certain universal elements have been identified in alchemical practice across cultures. One particularly attractive view of alchemy's origins was proposed in the mid-twentieth century by the historian of religions Mircea Eliade, who traced them to the rituals and specialized skills of early metallurgists. Eliade believed that these artisans—along with agriculturalists and those who learned to transform moist clay into vessels, bricks, and works of art—were the first to develop an awareness of humanity's ability to make strategic interventions capable

of altering the rhythms of nature. Through the use of fire, they could hasten the development of that which grew in the earth, and shorten the interval of time needed to bring things to perfection.

Over time, this idea was applied to human beings and the cosmos, thereby giving rise to distinct alchemical traditions in Africa, the Near East, Asia, and Europe. The smith came to be seen as a powerful figure, one with specialized knowledge of how to forge tools that could generate life or cause death. Early metalworkers were also viewed as masters of esoteric knowledge related to architecture, song, poetry, dance, and healing. They were peerless makers whose secrets were jealously guarded and passed on through initiatory guilds. In sum, for Eliade the various alchemical traditions known to us from around the world owe their origin, at least in part, to the lore and praxis of the ancient smith.

The modern legacy of alchemy consists of experimental disciplines such as chemistry, as well as those applied sciences aimed at harnessing the earth's natural, mineral, and other resources. It also consists of spiritual practices and techniques aimed at transforming the human consciousness. Thus, mystical religious traditions (Eastern and Western) as well as psychoanalytic theory are built upon older alchemical foundations. Recognition of the limited and nonrenewable state of many of our global resources will likely fuel continuing interest in careful observation of the natural world and cultivation of a global awareness of human interconnectedness. By means of such endeavors, future generations may continue to build on and carry forward a rich alchemical heritage.

Hugh Page Jr.

See also Enlightenment, The; Scientific Revolution

Further Reading

- Abraham, L. (1998). *A dictionary of alchemical imagery*. Cambridge, UK: Cambridge University Press.
- Eliade, M. (1978). *The forge and the crucible: The origins and structures of alchemy* (2nd ed., S. Corrin, Trans.). Chicago: University of Chicago Press.
- Lindsay, J. (1970). *The origins of alchemy in Greco-Roman Egypt*. London: Frederick Muller.

When I sell liquor, it's called bootlegging; when my patrons serve it on Lake Shore Drive, it's called hospitality. • AL CAPONE (1899–1947)

- Pritchard, A. (1980). *Alchemy: A bibliography of English language writings*. London: Routledge & Kegan Paul.
- Raff, J. (2000). *Jung and the Alchemical Imagination. Jung on the Hudson book series*. Berwick, ME: Nicholas-Hays.
- Roob, A. (2001). *Alchemy and mysticism* (S. Whiteside, Trans.). Koln, Germany: Taschen.
- Smith, S. (Ed.). (1995). *Funk and Wagnalls new international dictionary of the English language* (Vol. 1). Chicago: World Publishers.
- von Franz, M.-L. (1980). *Alchemy: An introduction to the symbolism and the psychology*. Toronto, Canada: Inner City Books.

Alcohol

It is probable that all human communities have used mind-altering substances in their rituals of hospitality and in their spiritual practices. Alcohol has for many millennia been the preferred mind-altering substance of the Mediterranean world, Europe, and perhaps a few other parts of the world, and in recent times its use has spread around the globe.

The word *alcohol* is derived from the Arabic *al-kuḥul*, which in turn derived from *kuhl*, one of whose meanings is “the essence” or “spirit” of something. To a chemist, the word *alcohol* describes a group of organic molecules with the general chemical formula $C_nH_{(2n+1)}OH$. To non-chemists, the word refers to a group of drinks with mind-altering properties, whose active ingredient (or essence) is ethanol, one of the simplest of all alcohols. The chemical formula for ethanol is CH_3CH_2OH .

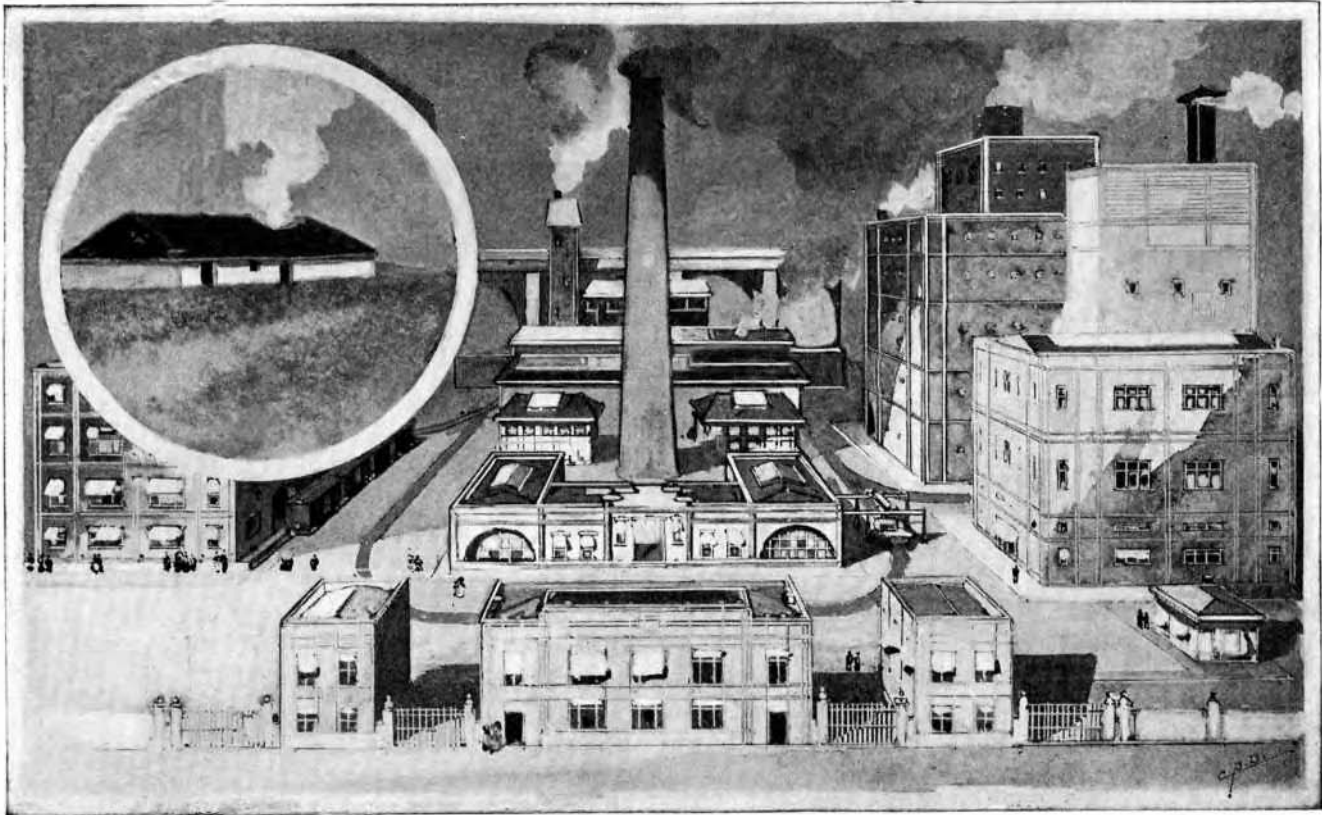
Ethanol is most commonly produced as a by-product of fermentation, a chemical reaction in which energy is released through the breakdown of glucose. But fermentation does not release all the energy locked up in sugars, and when alcohol is consumed, the human body can extract some of this remaining energy at the rate of just over 7 calories per gram of alcohol. This is why small amounts of alcohol can be energizing or relaxing. In larger quantities, above approximately .05 percent in the blood, alcohol acts as a depressant, affecting mainly the brain and nervous system, the way barbiturates and anesthetics do. Even in quite small quantities, alcohol can inhibit normal thought processes, leading to a loss of

social inhibitions that is often experienced as euphoria or release from stress. In extreme quantities, alcohol can incapacitate the nervous system entirely, leading to unconsciousness and even death. At blood level concentrations of more than .4 percent, most people will be anesthetized, and above .5 percent, they may stop breathing.

The Earliest Alcoholic Drinks

For historians, it is the social, cultural, political, and economic aspects of alcohol use that are most important. Fermentation is a natural process and can occur whenever substances rich in sugars (including grapes, berries, grains, honey, bananas, palm sap, agave, and even mare's milk) are left in warm, moist conditions and exposed to the air, so that airborne yeasts can come in contact with them and break them down into alcohol. It is tempting to suppose that alcoholic drinks first became important after the Neolithic revolution, when more and more humans became sedentary and farming communities began to store large quantities of grains or other starchy substances. The archaeologist Andrew Sherratt has argued, partly on the basis of the spread of drinking vessels, that in Eurasia alcoholic drinks first acquired social and cultural significance in Mesopotamia or the eastern Mediterranean from about the fourth millennium BCE, in areas where they could be made from grapes or dates. But alcoholic drinks were not confined to western Eurasia. Maize beers were used in Mesoamerica and Peru; and anthropological studies record their use in many small-scale farming societies in modern times.

Natural fermentation generates drinks of relatively low alcoholic content, anything from about 8 to 14 percent alcohol by volume for wines (grape alcohols) and from 2 to 8 percent for beers (grain alcohols). Concentrations higher than about 14 percent tend to kill yeast, so natural fermentation cannot proceed beyond this concentration. But most traditionally consumed alcoholic drinks probably contained much less alcohol. Weak alcoholic drinks such as kvass (a Russian rye beer) and koumiss (fermented mare's milk, drunk in Central Asia) usually are no more than 2 percent alcohol, and were often used as a



An early-twentieth-century industrialized distilling plant. Note the contrast with the traditional Irish plant shown in the inset.

safer alternative to river or pond water, particularly if they had been boiled at some stage in their preparation. Very weak alcoholic drinks were nutritious and safe, and often consumed by all members of society, including children.

The Psychosocial Uses of Alcohol

With care, however, it was always possible to brew stronger drinks, and we have evidence of these from all alcohol-producing civilizations. Stronger alcoholic drinks had much more psychic power and created a complex of opportunities and problems that are common to all psychoactive substances. Alcoholic drinks seem to have been widely used in rituals of hospitality. But their importance went beyond mere hospitality for, like all mind-altering substances, they could transport those who drank them to different psychic places, adding new dimensions to the experience of existence. It is likely that in many alcohol-using societies, such experiences have been conceived of in spiritual or religious terms. The psychologist Carl Jung (1875–1961) once described the craving for alcohol as

“the equivalent, on a low level, of the spiritual thirst of our being for wholeness; expressed in medieval language: the union with God” (Jung 1975, 2:623–624). The psychic power of this search was such that all societies have sought to control the use of psychoactive substances. In the case of shamans, the control takes the form of rigorous training in the use of such substances to enable psychic journeys. In village communities in alcohol-using societies, it has taken the form of communal rituals designed to regulate intoxication. The historian George Duby has argued that in the European Middle Ages, drinking festivals aimed “at one and the same time to half-open the gates of the unknowable and to reinforce group cohesion for mutual protection” (Duby 1974, 53). And the pharmacologist and medical historian C. D. Leake argued that

Generally, the use of [alcoholic drinks], which were thought to have magical powers, became socially and ritually controlled. Under these circumstances, whatever excesses might occur were indulged in by all the group, so that there remained a sense of social unity. The ritualistic use was often part of the organized religious services which tended to

The wine urges me on, the bewitching wine, which sets even a wise man to singing and to laughing gently and rouses him up to dance and brings forth words which were better unspoken. • HOMER (800 BCE–700 BCE)

bring the group together in a common experience and to relate the group more satisfactorily to its environment and its members to each other (C. D. Leake, in Lucia 1963, 6).

The psychic power of alcoholic drinks and the ease with which they could be produced ensured that alcoholic drinks became part of the very texture of rural life in all areas where they were produced. They played important roles in ritual and social occasions, they sealed commercial transactions, and they were used to treat the sick and anesthetize those in pain or to encourage those entering battle. Particularly in ritual contexts, their use often became obligatory; even those who preferred to do without them risked becoming social outcasts if they refused to drink at major ritual occasions such as religious festivals or marriages and funerals. However, in urban areas, where individuals were less subject to the control of their families, individuals were more likely to drink at will, so it is perhaps not surprising that the earliest evidence of individual rather than collective drunkenness seems to come from cities in ancient Egypt and Mesopotamia.

Increasing the Potency: Distilled Alcoholic Drinks

Distillation makes it possible to raise the concentration of alcohol, creating alcoholic drinks of greater psychic and social potency. Distillation exploits the fact that alcohol has lower boiling and freezing temperatures than water (respectively 78.5°C and –114.1°C). In extremely cold climates, it is possible to distill by leaving fermented drinks out in the cold. Because water freezes before alcohol, the concentration of alcohol can be increased simply by throwing away the ice and repeating the process several times. However, most distillation exploits the different boiling points of water and alcohol. Fermented drinks are boiled and the steam that results is condensed in a separate container. Because alcohol boils sooner than water, the condensed liquid has a higher concentration of alcohol than the original liquid; each new condensation raises the concentration of alcohol. Though rudimentary forms of distillation may have existed earlier, the first pot

stills were apparently used by Islamic alchemists about 1,000 years ago to distill grape wine, which is why some of the technical vocabulary associated with alcohol is of Arabic origin. Alchemists originally treated distilled wine as a medicine, but from the later Middle Ages it began to be used for recreational purposes in parts of Western Europe. Modern industrial distillation is based on techniques of fractional distillation, in which the alcohol-bearing vapors rise through a series of plates, each containing already-condensed vapor. At each plate, some of the water in the rising vapor condenses, while some of the alcohol in the condensed liquid vaporizes. The effect is similar to multiple redistillations.

Technically, distillation is significantly more complex than fermentation, and it needs to be handled carefully if the resultant drink is not to contain significant quantities of poisonous by-products. This is why, though wines, beers, and meads were produced in many peasant households, distilled drinks generally required specialist production and were more commonly traded through commercial networks. Because they were harder to produce at home, it was also easier to tax distilled drinks once consumers acquired a taste for them. And their superior potency ensured that, once introduced to them, consumers usually took to distilled drinks with great enthusiasm.

The Psychoactive Revolution

The production and spread of distilled liquors in recent centuries count as a significant part of a global change that the historian David Courtwright has described as the “psychoactive revolution”—the sudden availability through commercial channels of an unprecedented variety and quantity of mind-altering substances. “People everywhere have acquired progressively more, and more potent, means of altering their ordinary waking consciousness. One of the signal events of world history, this development had its roots in the transoceanic commerce and empire building of the modern period—that is, the years from about 1500 to 1789” (Courtwright 2000, 2). As more and more rural dwellers migrated temporarily or permanently to the towns and became more and more

entangled in the commercial networks of the wider world, and as alcoholic drinks became more varied and more available, the controls on consumption that had operated in most communities began to break down. Often, too, mind-altering substances, including alcohol, were introduced to communities with no experience of their use, often with devastating results. From North America to Siberia and the Pacific Islands, European traders found that alcoholic drinks had peculiar potency in societies unused to them and rapidly created new forms of addiction and dependence. Though their use often proved extremely destructive to traditional cultural norms, merchants and officials continued to supply them because they provided such powerful commercial and political leverage. Alcohol played as potent a role as guns and diseases in the building of European colonial empires.

Because of alcohol's damaging effects, states have played an increasingly important role in its regulation. Yet states have also earned significant revenues from the increasing trade in alcohol and other psychoactive substances. And it is this deeply ambiguous relationship between modern states and the trade in alcoholic drinks that explains why most modern states have been torn between prohibition (in vain attempts to maintain public order) and the sale of alcoholic drinks (in the hope of controlling consumption while simultaneously generating significant revenues). In Russia in the nineteenth century, close to 40 percent of government revenues came from the sale of alcoholic drinks, which was enough to pay most of the expenses of the army that made Russia a great power. In nineteenth-century England, alcohol generated a similar share of government revenue. Indeed, most modern states have depended on revenues from mind-altering substances of some kind, so it is no wonder that no modern state has succeeded in entirely banning their consumption. On the contrary, alcoholic drinks have now spread around the entire world, so that today they may be the most widely traded and most widely consumed of all mind-altering substances.

David Christian

See also Drugs

Further Reading

- Austin, G. A. (1985). *Alcohol in Western society from antiquity to 1800: A chronological history*. Santa Barbara, CA.: ABC-CLIO.
- Christian, D. (1990). *Living water: Vodka and Russian society on the eve of emancipation*. Oxford, UK: Clarendon Press.
- Courtwright, D. T. (2001). *Forces of habit: Drugs and the making of the modern world*. Cambridge, MA: Harvard University Press.
- Duby, G. (1974). *The early growth of the European economy: Warriors and peasants from the seventh to the twelfth century* (H. B. Clarke, Trans.). London: Weidenfeld & Nicolson.
- Fernández-Armesto, F. (2002). *Near a thousand tables: A history of food*. New York: Free Press.
- Harrison, B. (1971). *Drink and the Victorians: The temperance question in England, 1815–1872*. London: Faber & Faber.
- Heath, D. B., & Cooper, A. M. (1981). *Alcohol use and world cultures: A comprehensive bibliography of anthropological sources*. Toronto, Canada: Addiction Research Foundation.
- Jung, C. G. (1975). *Letters* (G. Adler, Ed. & A. Jaffe, Trans.). Princeton, NJ: Princeton University Press.
- Lucia, S. P. (Ed.). (1963). *Alcohol and civilization*. New York: McGraw Hill.
- Rouché, B. (1960). *The neutral spirit: A portrait of alcohol*. Boston: Little, Brown.
- Sherratt, A. (1997). *Economy and society in prehistoric Europe: Changing perspectives*. Princeton, NJ: Princeton University Press.
- Tannahill, R. (1989). *Food in history* (Rev. ed.). New York: Crown.

Alexander the Great

(356–323 BCE)

KING OF MACEDONIA

The thirteen-year reign of Alexander III of Macedon (336–323 BCE) fundamentally changed the political and cultural structure of ancient southwestern Asia. The Persian empire, which had ruled the vast region from the Mediterranean to the borders of India, disappeared in 330 BCE as the result of Alexander's conquests, replaced by a new multistate system dominated by Macedonians and Greeks. The region's center of gravity shifted westward from its ancient focus in Mesopotamia and southwestern Iran to the shores of the Mediterranean and Greece, and Greek culture replaced the ancient cuneiform tradition as the culture of its elite. At the same time diplomatic and commercial ties were established that



Alexander the Great in a bust from 1724.

eventually linked together the civilizations from Europe to China.

Alexander was born in 356 BCE, the first child of Philip II (360–336 BCE) of Macedon and his principal wife, Olympias. He was raised in keeping with his status as Philip's heir, being educated by the philosopher Aristotle and trained by his father for his role as king and the commander of the Macedonian army. When he succeeded his father as king in 336 BCE, Alexander was ready to continue the invasion of the Persian empire, which had been begun by Philip. Alexander devoted the first two years of his reign to consolidating his hold on power. Rapid campaigns in the northern Balkans and Greece headed off rebellions by Macedon's Greek and non-Greek subjects

*There is no such thing as an inevitable war.
If war comes it will be from failure of human
wisdom.* • ANDREW B. LAW (1858–1923)

and secured his appointment as *hegemon* ("leader") of the Corinthian League and commander in the war against Persia. With his power base secure, Alexander crossed into Asia in spring 334 BCE at the head of an army of approximately 35,000 men.

During the next decade Alexander campaigned as far as western India before being compelled by a mutiny of his army to return to the west, where he died in Babylon in June 323 BCE. This remarkable campaign divides into three distinct phases. The first phase, which lasted from 334 BCE to 330 BCE, is known as the "Greek Crusade" and was marked by the great set battles of Granicus, Issus, and Gaugamela and climaxed with the destruction of the Persian capital of Persepolis and the assassination of the Persian king Darius III by his own officers. The second phase, which lasted from 330 BCE to 327 BCE, saw Alexander adopt various aspects of Persian royal ceremonial and practice despite Macedonian and Greek opposition in order to attract Iranian support in the face of fierce guerrilla resistance in central Asia. The third and final phase of the campaign began with the two years that Alexander spent in India and ended with his disastrous return to the west through Baluchistan and his death in Babylon, while planning further campaigns, beginning with an invasion of Arabia.

Historians' interpretations of Alexander's spectacular reign vary widely for understandable reasons. There are few primary sources for the period. Of the many accounts written by his contemporaries and the numerous documents issued by his government such as existed, only fragments and a few inscriptions survive. Therefore, historians depend on five Greek and Latin biographies of Alexander written between the mid-first century BCE and the second century CE for their information. Also lacking are sources that reflect the perspectives of the Persians and the other peoples Alexander encountered. As a result, while the outline of his career is clear, widely divergent theories have been proposed concerning Alexander's ultimate goals, ranging from the popular pre-World War II belief that he wished to realize the philosophical dream of the unity of all mankind to the contemporary

Plutarch on Alexander the Great

... The statues that gave the best representation of Alexander's person, were those of Lysippus, (by whom alone he would suffer his image to be made,) those peculiarities which many of his successors afterwards and his friends used to affect to imitate, the inclination of his head a little on one side towards his left shoulder, and his melting eye, having been expressed by this artist with great exactness... He was fair and of a light color, passing into ruddiness in his face and upon his breast. Aristoxenus in his Memoirs tells us that a most agreeable odor exhaled from his skin, and that his breath and body all over was so fragrant as to perfume the clothes which he wore next him; ... His temperance, as to the pleasures of the body, was apparent in him in his very childhood, as he was with much difficulty incited to them, and always used them with great moderation; though in other things he was extremely eager and vehement, and in his love of glory, and the pursuit of it, he showed a solidity of high spirit and magnanimity far above his age. . . .

Source: Plutarch. (1931). Alexander. In *Everybody's Plutarch* (R. T. Bond, Ed. & J. Dryden, Trans.; p. 534). New York: Dodd, Mead & Co.

view that Alexander was a vicious conqueror with no goals beyond glory and personal aggrandizement.

The sources are only part of the problem, however. Equally important is the fact that Alexander died before he could develop a final plan for the governing of his empire. Instead, he improvised various solutions to the administrative problems that arose during the course of his campaigns. Thus, while he became more and more autocratic, which was encouraged by his belief in his semidivine status as the "Son of Ammon," and he continued his efforts to supplement the limited Macedonian and Greek manpower available to him by encouraging collaboration by native elites, neither development had been institutionalized at the time of his death. Paradoxically, therefore, Alexander's principal contribution to history

was essentially negative: He destroyed the Persian empire and with it the state system that had dominated ancient southwestern Asia for two centuries. It would be left to his successors to devise a new state system to replace it.

Stanley M. Burstein

See also Macedonian Empire

Further Reading

- Bosworth, A. B. (1988). *Conquest and empire: The reign of Alexander the Great*. Cambridge, UK: Cambridge University Press.
- Bosworth, A. B. (2002). *The legacy of Alexander: Politics, warfare, and propaganda under the successors*. Oxford, UK: Oxford University Press.
- Cook, J. M. (1983). *The Persian empire*. London: J. M. Dent & Sons.
- Stoneman, R. (1997). *Alexander the Great*. London: Routledge.
- Worthington, I. (Ed.). (2003). *Alexander the Great: A reader*. London: Routledge.

al-Khwarizmi

(c. 780–c. 850)

ARAB MATHEMATICIAN

Al-Khwarizmi's family name gave Europe the term *Algorithm*, and one of his books, *Hisab al-Jabr wal-muqabalah*, was the origin of the word *algebra*. His full name was Abu Abdullah Muhammad ibn Musa al-Khwarizmi. He was a Muslim astronomer, geographer, and, most importantly, mathematician. He was born in the Persian town of Khiva, in what is now Uzbekistan.

In his youth, al-Khwarizmi's parents moved from Persia to Iraq and settled in the bustling city of Baghdad. In Baghdad, young al-Khwarizmi was attracted to the Bait al-Hikmah (House of Wisdom), an institution where literary scholars, philosophers, natural scientists, mathematicians, and medical doctors from around the region worked on ancient Greek texts. Later, Muslim scholars passed this wonderful body of knowledge to Europe, where it sparked the Renaissance. Al-Mamun (786–833), the caliph of Baghdad, who had founded the

House of Wisdom in 830, patronized its scientific research. Al-Khwarizmi dedicated some of his works to the caliph in gratitude for the caliph's having made available to scholars the first and best library since that of Alexandria.

Al-Khwarizmi investigated numbers far more deeply than did anyone in the European medieval world. His study of structures, surfaces, pyramids, cones, circles, and triangles took mathematics and algebra to new heights. It was al-Khwarizmi who revolutionized the use of math in arithmetic, algebra, and geometry. Interestingly, his original and innovative use of advanced math was used to help solve the problems occasioned by the complex Islamic laws of inheritance and divisions of estates and assets among brothers and sisters at the death of their parents.

This father of algebra and algorithms conducted life-long research on the Hindu numerical system and the Hebrew calendar, and he studied ancient Egyptian sundials and Syrian texts. He derived new concepts and consolidated others relating to Arabic numerals and zero as well as to the decimal system. The world's first correct astronomical tables and explanation of the movements of the sun, the moon, and the five planets closest to Earth were the works of al-Khwarizmi. He also had a superior sense of world geography and wrote a book on the topic, *Surat al-Arz* (Shape of the Earth). At the suggestion of al-Mamun, he oversaw a team of sixty-nine and produced the first correct world map in world history. This too was done to solve a practical problem: Muslims around the world needed to know what direction to face (namely, toward the Kaaba in the city of Mecca, Saudi Arabia) to offer their daily obligatory five prayers. Thanks to the efforts of al-Khwarizmi and others, this problem was solved by finding the shortest arc of the great circle anywhere on the globe between a person's location and Mecca.

The world stands in gratitude to al-Khwarizmi for the use of Arabic numbers, decimals, and the value of zero in math, algebra, geometry, and trigonometry, and for the production of correct world maps.

Abdul-Karim Khan

See also Islamic World

Further Reading

- Esposito, J. L. (1999). *The Oxford history of Islam*. New York: Oxford University Press.
- Rashid, R. (1994). *The development of Arabic mathematics: Between arithmetic and algebra*. Boston: Kluwer Academic.
- van der Waerden, B. L. (1985). *A history of algebra: From al-Khwarizmi to Emmy Noether*. New York: Springer-Verlag.

al-Razi

(c. 865–c. 925 CE)

ISLAMIC PHYSICIAN AND PHILOSOPHER

Abu Bakr Muhammad ibn Zakariya' al-Razi, also known to Europeans by his Latinized name of Rhazes, was one the most influential Islamic physicians of the pre-modern era. Razi's contributions have been favorably compared to those of such early physicians and scientists as Hippocrates (c. 460–c. 377 BCE), Galen (1229–c. 199 CE), Ibn Sina (980–1037), and Vesalius (1514–1564). Razi's works were widely used throughout medieval and Renaissance Europe. His translations and original works provided a critical link among ancient Greek, Persian, and Indian medical traditions and the later works of medieval and Renaissance physicians in Europe. In addition to his importance in the field of medicine, Razi's fame also stems from his work as an alchemist and free-thinking philosopher.

Razi was born in the Persian city of al-Rayy (modern Shahr-e-Rey), near present-day Tehran, Iran. As a young man he cultivated talents in music, philosophy, and alchemy; however, as he grew older, he turned his attention to the study of medicine. During his distinguished career as a physician, he directed hospitals in both Rayy and Baghdad. He also enjoyed royal patronage, traveling extensively in the service of the Samanid courts throughout Khorasan and Transoxiana (a Persian-Islamic dynasty in Central Asia, vassal of the Abbasids, from around 819 to 1005). Yet, far from leading the life of an idle courtier, Razi was praised as a tireless and compassionate clinician and teacher as well as a prolific writer.

Razi's most famous medical works are the *Kitab al-*

Truth in medicine is an unattainable goal, and the art as described in books is far beneath the knowledge of an experienced and thoughtful physician. • AL-RAZI (C. 864–C. 930)

Hawi (*Liber Continens*; The Comprehensive Book of Medicine) and the *Kitab al-Mansuri* (*Liber Almansoris*; The Book of Medicine for Mansur). The *Kitab al-Hawi*, a twenty-three-volume encyclopedia posthumously prepared by Razi's pupils, contains extracts from Greek, Indian, and Arabic sources on pathology, therapy, and pharmacology as well as records from his own clinical experience. The *Kitab al-Hawi* was translated into Latin in 1279 by Faraj ibn Salim, a Sicilian-Jewish physician employed by Charles I of Anjou. Thereafter, it became widely used throughout Europe as an encyclopedia and teaching manual. Similarly, the *Kitab al-Mansuri* became highly prized in Europe after its translation into Latin as the *Almansoris* by Gerard of Cremona (d. 1187). During the Renaissance, its ninth chapter, *Liber Nonus*, was often circulated by itself or with commentaries by leading physicians such as Vesalius. Another of Razi's most influential treatises, the *Kitab fi al-Jadari wa al-Hasbah* (Treatise on Smallpox and Measles), was the first to distinguish smallpox from measles. He also wrote treatises on kidney and bladder stones, diabetes, childhood diseases, allergies, psychosomatic medicine, and medical ethics.

Razi's works are characteristic of medieval Islamic medicine in that they are based primarily upon the Greek scholarship of Hippocrates and especially that of Galen. However, despite his immense respect for the Galenic tradition, Razi claimed that his own clinical experience exceeded Galen's. Razi noted that his clinical methodology of studying cases contradicted Galen's description of fevers, which Razi believed to have been inspired by philosophical dogma. He even called into question the Galenic system of balancing the body's "humors," or elements. Accordingly, Razi—and indeed other Islamic physicians of the period—should not be seen as mere preservers of Greek medical thought during Europe's so-called Dark Ages, but rather as innovators in their own right.

Just as Razi relied on his clinical experiences and logic in the field of medicine, his empirical thinking led him to deny occultist and symbolic significance in his study of alchemy. Because of this, he may be seen as hav-

ing transformed the study of alchemy into an embryonic form of chemistry. Throughout his works there are descriptions and classifications of mineral substances, chemical processes, and explanations of experimentation that meet the standards of empirical investigation in modern chemistry. While Razi's famous *Sirr al-Asrar* (Secret of Secrets) has generally been classified as alchemy, such a classification fails to take into account Razi's philosophical preferences—evident in *Sirr al-Asrar*—for reason, science, and observable reality over prophecy, revelation, and spiritual symbolism.

Razi's philosophical positions regarding reason and revealed religion were among the most heretical in the medieval Islamic world. He believed that man's intellect or reason was a divine gift that made revelation and prophecy superfluous. Razi praised humanity's intellectual potential, but violently attacked revealed religion, detailing how revealed religions and prophecies contradicted one another, were hostile toward scientific and philosophical progress, and were ultimately sources of conflict. He showed an obvious preference for Greek philosophy over the wisdom offered by the Quran. Thus, unlike Islamic Aristotelians, Razi denied the possibility of reconciling philosophy and religion.

As a result of Razi's heretical views, his contributions to philosophy in the Islamic world have been marginalized. Moreover, because his ideas never gained a large audience in the Islamic world, their impact on his small audience of Christian readers was limited at best. Yet, from a world historical perspective, Razi's free-thinking is still relevant. It challenges scholars to alter the monolithic picture of Islamic civilization that is often presented in Western scholarship. Similarly, Razi's important role in the development of Western medical practice indicates the necessity of expanding the history of science and medicine beyond the study of modern Europe to include more Islamic contributions, especially during the Middle Ages, an era in which Islamic rather than European scholarship reigned supreme.

Michael C. Low

See also Islamic World

Further Reading

- Arberry, A. J. (Trans.). (1950). *The spiritual physick of Rhazes*. London: John Murray.
- Iskandar, A. Z. (1975). The medical bibliography of al-Razi. In G. Hourani (Ed.), *Essays on Islamic philosophy and science* (pp. 41–46). Albany: State University of New York Press.
- Iskandar, A. Z. (1990). al-Razi. In M. J. L. Young, J. D. Latham, & R. B. Serjeant (Eds.), *Religion, learning, and science in the Abbasid period* (pp. 370–377). Cambridge, UK: Cambridge University Press.
- Meyerhof, M. (1935). Thirty-three clinical observations by Rhazes. *Isis*, 23, 321–356.
- Nasr, S. H. (1981). *Islamic life and thought*. Albany: State University of New York Press.
- Qadir, C. A. (1988). *Philosophy and science in the Islamic world*. London: Croom Helm.
- Stroumsa, S. (1999). *Free thinkers of medieval Islam: Ibn al-Rawandi, Abu Bakr al-Razi and their impact on Islamic thought*. Leiden, Netherlands: Brill.
- Ullman, M. (1978). *Islamic medicine*. Edinburgh, UK: Edinburgh University Press.
- Walzer, R. (1962). *Greek into Arabic: Essays on Islamic philosophy*. Cambridge, MA: Harvard University Press.

American Empire

People often have difficulty discussing the “American empire” because the global reach of the United States differs from that of traditional empires and because people generally believe that the United States has not been an imperial power.

The American empire, however, is real, with historical roots in the founding of the republic during the eighteenth century, evolution during the nineteenth century, and maturation during the early twentieth century. By the latter years of the twentieth century, especially resulting from the impact of two world wars, the United States possessed more power and had more global political and economic interests than any empire in the modern era.

U.S. imperialism developed in a markedly different way than that of traditional European empires. Rather than invade countries with large armies, send in agents of occupation, maintain political and economic control through institutions it created and staffed with officials from the mother country and local collaborative elites,

and restrict colonial sovereignty, U.S. officials and businesspeople created an empire that was principally commercial, based on free trade and massive overseas investment. After that empire was established, the United States had overwhelming influence and wealth and was able to control affairs in associated countries with great efficiency for the most part. So, without the formal trappings—and much of the political baggage—of imperialism, the United States enjoyed the greatest benefits of empire throughout much of the twentieth century.

Blueprint for the Empire

One can observe the foundations of empire from the outset of the U.S. republic. When seeking autonomy from the British empire during the late 1700s, U.S. leaders devised a program for global influence, with John Adams even writing a “model treaty” for prospective alliances with the established powers of Europe that would have given the new country equal commercial footing with them based on the concepts of free trade and “most favored nation” trading rights.

Adams’s vision would have to wait, but others developed the imperial program further. After U.S. independence, U.S. leaders such as Alexander Hamilton recognized that economic power, especially via industrial development, could lead to world power. Consequently, during much of the nineteenth century, the U.S. government pursued a program of industrialization, with protective tariffs, government grants, tax incentives, and subsidies to promote industrial and international growth.

The global interests of the United States at the time were still limited, subordinate to the need to develop the economy at home. However, by midcentury one could see the United States stepping out into the world, taking land by force or purchase in Oregon, Texas, California, Alaska, and elsewhere and envisioning a Caribbean empire in Cuba, Santo Domingo, Nicaragua, and other places; deploying gunships to Japan to demand open markets; creating bonds with British financiers to pay for the Civil War; and sending missionaries and businesspeople to foreign lands to expand U.S. interests all over the world.

America is the only country that went from barbarism to decadence without civilization in between. • OSCAR WILDE (1854–1900)

Stepping Out

By the latter 1800s the United States was about to become an imperial power, through both design and necessity. U.S. theorists of empire, such as Alfred Thayer Mahan, Minister Josiah Strong, and Brooks Adams, cited the need to expand republican institutions and Christian doctrine, fulfill manifest destiny (a future event accepted as inevitable) and social Darwinism, and expand “civilization” to avoid decay. They pressed for an imperial agenda and reached responsive and influential targets such as Presidents William McKinley, Theodore Roosevelt, William Howard Taft, and Woodrow Wilson as well as most diplomatic officials, business leaders, and media representatives. The United States was embracing the ideology of imperialism and, during the 1890s, stepping out into the world aggressively with purpose and success. Secretary of State Richard Olney boasted, for instance, that “the United States is practically sovereign on this continent, and its fiat is law upon the subjects to which it confines its interposition.”

The principal factor in the U.S. emergence as a global power, however, was the need for foreign commercial relationships to avert economic crises at home. During the latter part of the nineteenth century the United States was wracked with labor and agricultural unrest, currency controversies, and deflation and depression. As the U.S. oil magnate John D. Rockefeller explained, “dependent solely upon local business, we should have failed years ago. We were forced to extend our markets and to seek for foreign trade” (Buzzanco 1999, 575–607).

Accordingly, the United States, using the liberation of Cuba from Spanish rule as its pretext, went to war in 1898 and ultimately took control of not only Cuba, but also Puerto Rico, Guam, the Philippines, and Hawaii—the only places where the United States would establish the formal trappings of empire. Its global reach, however, would only grow.

Buttressed by what President William Howard Taft would call “dollar diplomacy,” U.S. officials would replace bullets with the dollars in his formulation. The United States embarked on a path toward world power that

would create the greatest empire in modern times, one based on finance capital, private markets, the exploitation of raw materials elsewhere, the search for cheap labor, and global consumption. In the process U.S. officials would extend national power into all areas, using force when necessary to create commercial opportunities. As soon-to-be President Woodrow Wilson observed in 1907, “since . . . the manufacturer insists on having the world as a market, the flag of his nation must follow him, and the doors of nations which are closed against him must be battered down. Concessions obtained by financiers must be safeguarded by ministers of state even if the sovereignty of unwilling nations be outraged in the process” (Parenti 1995, 40).

By 1914, the eve of World War I, the United States was extensively involved in the economic and political lives of societies on every continent, with growing interests in China, Mexico, and the Caribbean. The United States began to extend its power more aggressively, intervening in the Boxer Rebellion in China, the Russian Civil War, the Mexican Revolution, and the affairs of a host of Latin American countries per the “Roosevelt Corollary,” which asserted the right of the United States to act as a global policeman in the hemisphere. With the outbreak of war in Europe, President Woodrow Wilson’s “liberal capitalist internationalism” would lead the United States into the first rank of world powers.

World Wars and World Power

Woodrow Wilson, like Roosevelt and Taft before him, believed that capitalism, not traditional imperialism, leads to the greatest wealth and power and would promote peaceful relations between nations. Countries that traded, these presidents reasoned, would be less likely to fight. In 1914, as the European powers went to war, the United States was the greatest industrial power in the world but had limited military capabilities. Wilson would thus use the power of capital to extend U.S. influence, conducting vitally needed trade with Britain and France, brokering loans to the allies to keep them afloat and fighting, and



Whoever wants to know the heart and mind of America had better learn baseball, the rules and realities of the game—and do it by watching first some high school or small-town teams. • JACQUES BARZUN (B. 1907)

finally intervening in 1917 to preserve the British gold standard. Wilson's involvement paid off. By 1919 the United States, which had entered the war as a debtor nation, had \$11.7 billion in credits, and the seat of global economic power had moved from London to Wall Street.

During the ensuing decades, even with the vagaries of global depression and so-called isolationism, the American empire proceeded apace. Viewing the maintenance of the Open Door (a policy giving opportunity for commercial relations with a country to all nations on equal terms) as “the road away from Revolution,” President Herbert Hoover and politicians during the 1920s and 1930s continued the aggressive search for markets, with U.S. military intervention and repressive client states backing up that approach, particularly in Latin America. Even with the advent of the “Good Neighbor Policy” of President Franklin D. Roosevelt, the U.S. economic stake and political influence in Latin America grew, setting the stage for later anti-American movements in Latin America.

By the 1940s, then, the United States had maintained as much politico-economic power as possible given the global crises of depression and militarism in Europe and Asia and was about to emerge as the dominant global power with the coming of World War II.

Germany and Japan posed threats to the global community not just because they invaded sovereign lands, but also because their versions of economic nationalism, or autarky, threatened to close off large and economically crucial regions to open commerce. Hence, the United States had to take action against such aggression, and, after Germany's aggression in France, Britain, and the Soviet Union and the Japanese attack at Pearl Harbor, Roosevelt began to mobilize the economy for war, send huge amounts of military materiel to the anti-Axis nations, and ultimately commit U.S. troops to Europe and the Pacific to defend commercial liberty. The Axis powers were Germany, Italy, and Japan. At war's end in 1945 most of Europe and Asia was devastated, with massive reconstruction needs looming. However, the United States came out of the war stronger than ever, with the new Bretton Woods system—the International Monetary Fund (IMF) and World Bank along with the dollar set as

the world's currency, fully convertible to gold—in place as a means of economic influence.

Positions of Disparity

Using the IMF, World Bank, reconstruction loans, and the Marshall Plan (a plan for economic recovery in European countries after World War II), as well as wielding preponderant military power and holding nuclear weapons, Washington was able to exercise vast economic, and hence political, influence during the Cold War. Indeed, after World War II the United States would exercise arguably the greatest power in the modern era and would extend it to all points of the globe. Writing in 1948, the U.S. diplomat George Frost Kennan candidly observed that “we have 50 percent of the world's wealth, but only 6.3 percent of its population . . . Our real task in the coming period is to devise a pattern of relationships that will allow us to maintain this position of disparity.” Thus, during subsequent decades the American empire would inexorably expand, by both commercial and military means.

In 1950 the U.S. National Security Council produced *NSC-68*, perhaps the most important postwar document concerning the growth of U.S. power. In that document the NSC urged vast increases in military spending to contain not only the Soviet Union but also any country that threatened U.S. interests. This urging gave great impetus to the so-called military-industrial complex. Defense spending and the arms race soared as the United States became involved in commercial and political affairs seemingly everywhere. Not only did Washington promote free trade and investment abroad, but also it intervened militarily in disparate places such as Korea, Iran, Guatemala, Indonesia, and Lebanon when it perceived that its economic interests were at risk. At the same time, taking advantage of the power of the dollar and the Bretton Woods institutions, the United States forced former empires to open their markets to U.S. traders and investors, thereby giving U.S. business interests global access. At home this period of economic expansion created prosperity for working people, while the political force of McCarthyism and the Red Scare kept critics of

What prudent merchant will hazard his fortunes in any new branch of commerce when he knows not that his plans may be rendered unlawful before they can be executed? • JAMES MADISON (1751–1836)

this expanded empire silent or ineffective. McCarthyism, named after U.S. Senator Joseph McCarthy, was a political attitude characterized by opposition to elements held to be subversive and by the use of tactics involving personal attacks.

By the mid-1960s the United States could wield the power of the dollar and the armed forces to promote its interests virtually everywhere. However, limits to U.S. power began to appear. The United States was unable, for instance, to remove the Communist government of Fidel Castro in Cuba but, more to the point, found itself increasingly tied down in a growing war in Vietnam, which would ultimately expose the shortcomings of U.S. power both militarily and economically. Despite staggering amounts of firepower, the United States could not subdue the Vietnamese Communist/nationalist movement for liberation. Meanwhile the soaring costs of the war caused massive deficits in the U.S. balance-of-payments ledger and a run on gold, per the Bretton Woods system. By 1971 President Richard Nixon had to essentially concede the limits of empire by abandoning the Bretton Woods system and taking the country off the gold standard. Politically, challenges to U.S. interests emerged globally as well in southeastern Asia, Africa, Latin America, and other areas where U.S. power was once unparalleled. By the late 1970s such developments, worsened by “oil shocks” in 1973 and 1979 and the emergence of Japan and the Federal Republic of Germany as economic competitors, made the American empire appear to be on the wane.

Barely a decade later, however, the empire had struck back. Massive military spending during the administration of President Ronald Reagan and the collapse of the Communist system in Eastern Europe left the United States without a serious rival for power; thus, despite massive deficits at home, the United States again stood alone as a global hegemon (influence). Supranational economic arrangements such as the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA) and wars against national liberation movements in Central America signaled to the world that Washington would not yield its power quietly, that it

would, in fact, continue to craft the free trade empire that it had begun a century earlier.

By the mid-1990s, with a convincing show of military power in the Middle East and a commitment to globalization in effect, the United States seemed to have the unlimited ability to wage war and gain access to markets. However, this newly expanded hegemony brought a new level of criticism with it. Not only human rights groups and activists, but also less developed countries and even sectors of the ruling class began to question the power of transnational corporations and supranational institutions, such as the WTO and NAFTA, that determined the rules of commerce. The terrorist attacks in the United States on September 11, 2001 and the positive response in some parts of the world were another signal that U.S. power had its limits and that the U.S. imperial mission had its enemies.



A tribute to the victims of the 9/11 attacks on the World Trade Center and Pentagon.

More telling, the U.S. response to those attacks, especially its invasion of Iraq, led to the most serious attack on the imperial position of the United States in a half-century. The George W. Bush administration's war against Iraq, conducted largely unilaterally, undermined U.S. prestige, worsened strains in the U.S. relationship with critical European allies, fueled anti-Americanism abroad to new heights, and led to a bloody occupation in Iraq. The Bush administration, it seems, had abandoned the liberal globalizing mission that has defined the American empire and was returning to older forms of unilateral *imperium* (supreme power), not dissimilar to the nineteenth-century European way. Coupled with the attack on globalization, the problems attendant on policies in the Middle East, not only with Iraq but also with U.S. support of Israel, could well weaken the U.S. position in the world, perhaps to depths not seen since the earlier stages of the twentieth century.

In just a little more than a century the United States emerged as a global power, reached commanding heights of power and wealth, had an incredible ability to create a liberal, imperial world, and has seen its positions criticized and attacked. At the outset of a new century, however, new challenges—and new limits—face the American empire, and new strategies will be required to address this new world.

Robert Buzzanco

See also Globalization; Modernity; Postmodernism; Revolution—United States; Western Civilization

Further Reading

- Bacevich, A. J. (2002). *American empire: The realities and consequences of U.S. diplomacy*. Cambridge, MA: Harvard University Press.
- Buhle, P., & Rice-Maximin, E. (1995). *William Appleman Williams: The tragedy of empire*. New York: Routledge.
- Buzzanco, R. (1999). What happened to the new left: Toward a radical reading of U.S. foreign relations. *Diplomatic History*, 23, 575–607.
- Chomsky, N. (2003). *Hegemony or survival: America's quest for full spectrum dominance*. New York: Metropolitan Books.
- Ferguson, N. (2004). *Colossus: The price of America's empire*. New York: Penguin Press.
- Greider, W. (1997). *One world, ready or not: The manic logic of global capitalism*. New York: Simon & Schuster.
- Hardt, M., & Negri, A. (2000). *Empire*. Cambridge, MA: Harvard University Press.
- Johnson, C. (2004). *The sorrows of empire: Militarism, secrecy, and the end of the republic*. New York: Metropolitan Books.
- LaFeber, W. (1963). *The new empire: An interpretation of American expansion, 1860–1898*. Ithaca, NY: Cornell University Press.
- LaFeber, W. (1999). *Michael Jordan and the new global capitalism*. New York: W. W. Norton.
- Magdoff, H. (1969). *The age of imperialism: The economics of U.S. foreign policy*. New York: Monthly Review Press.
- Parenti, M. (1995). *Against empire*. San Francisco: City Light Books.
- Rosenberg, E. (1999). *Financial missionaries to the world: The politics and culture of dollar diplomacy, 1900–1930*. Cambridge, MA: Harvard University Press.
- Said, E. (1994). *Culture and imperialism*. New York: Vintage Books.
- Williams, W. A. (1969). *The roots of the modern American empire: A study of the growth and shaping of social consciousness in a marketplace society*. New York: Random House.
- Williams, W. A. (Ed.). (1972). *From colony to empire: Essays in the history of American foreign relations*. New York: J. Wiley.
- Williams, W. A. (1972). *The tragedy of American diplomacy*. New York: Dell.
- Williams, W. A. (1980). *Empire as a way of life: An essay on the causes and character of America's present predicament, along with a few thoughts about an alternative*. New York: Oxford University Press.

Andean States

A state can be defined as a regionally organized polity that contains a hierarchical and centralized political structure that maintains social stratification and coordinates human efforts. Unlike civilizations in many other regions of the world, the civilization in the Andes had no system of writing prior to the Spanish conquest in the 1530s. Therefore, there are only eyewitness accounts of the last Andean state, the Inca empire. The Incas, however, were the culmination of a process of state development that began more than 4,000 years earlier. Our understanding of earlier states of the Andes must be gleaned almost exclusively from the archaeological record. This reliance on the artifacts and sites left behind unfortunately creates interpretation problems for scholars. The “footprint” of a state can look very similar to the “footprint” of a chiefdom; the nuances of a state's ideology and economic system can be difficult to understand from collections of pots and rocks. Nonetheless, a tenta-

Key Dates in the History of the Andean States

6000 BCE	Foraging peoples begin farming as well as foraging and fishing.
3500–1500 BCE	Valdivia culture period in Ecuador.
3000 BCE	Permanent villages appear along the coast.
1800–800 BCE	Monumental architecture tradition leads to much building.
400–200 BCE	Chávin de Huántar is a major pilgrimage center.
400–200 BCE	Moche emerges as the dominant culture.
500 CE	Wari emerges as a regional center in central Peru.
550 CE	Tiwanaku emerges as a regional center in the Lake Titicaca region.
600–800 CE	Moche culture declines in regional influence.
900 CE	Chimu emerges as a regional center in northern coastal Peru.
1000	Wari and Tiwanaku decline as regional centers.
1400	The Inca state emerges as the largest and dominant regional power.
1500	The Inca state declines due to rebellions and then disease.
1533	The Inca state collapses when the Spanish capture Cuzco.

tive picture of the evolution of Andean states can be drawn based on decades of meticulous archaeological work.

State Foundations

By about 6000 BCE, hunting and gathering groups both in the high Andes and along the Pacific coast of South America transitioned slowly into a mixed subsistence strategy of gathering, fishing, and farming. This transition led to the establishment of small, semipermanent villages that dotted the seaboard by 3000 BCE and to the development of more politically complex societies on the coasts of present-day Ecuador and central Peru. In Ecuador, the Valdivia culture (3500–1500 BCE) shifted slowly toward more intensive fishing and agricultural practices, and some status inequalities may have emerged. The largest Valdivia sites, such as Real Alto, grew to more than 30 hectares, and at their height they boasted a ring of houses surrounding a plaza and two small mounds. Valdivia's monumental architecture, however, pales in comparison to that of the Supe valley of central Peru. In the middle of the third millennium BCE, as many as eighteen cities grew in the valley on the strength of an economy based on cotton cultivation and interregional trade. The best documented of these sites,

Caral, is a 68-hectare complex containing six stepped pyramids, the largest of which is 19.5 meters tall and 135–150 meters at its base. The site, radiocarbon dated to 2627–1977 BCE, boasted elite residences, workshops, and commoner dwellings.

While the Valdivia culture declined in the second millennium BCE, the monumental architecture tradition continued on the northern and central coast of Peru. From 1800 BCE to 800 BCE, villagers built scores of sunken courts, platform mounds, and temples. These sites were suddenly abandoned around 800 BCE, perhaps due to catastrophic flooding from an El Niño weather phenomenon. The highland site of Chávin de Huántar, located in the northern highlands of Peru, rose in importance after this event. At the peak of its power from 400 BCE to 200 BCE, the site was an important pilgrimage center—as evidenced by artifacts found there from a wide region, along with ritual objects and shamanic iconography—whose influence could be seen on artistic styles throughout much of Peru. At this time, the site covered almost 30 hectares and was dominated by a 2.25-hectare monumental stone temple riddled with galleries, air shafts, and water channels. The sites from these periods were often massive, but were likely not the products of a state-level civilization. At this time, the degree of status

Modern man lives isolated in his artificial environment, not because the artificial is evil as such, but because of his lack of comprehension of the forces which make it work—of the principles which relate his gadgets to the forces of nature, to the universal order.

differences and labor specialization appear insufficient for a state. Nonetheless, the harbingers of the state can be seen in the ability of these polities to organize large amounts of labor for construction projects, the separation of people into different status groups, and an increasing tendency toward labor specialization. The trends toward statehood culminated in the development of the Moche culture on Peru's north coast.

Moche

By the end of the first century CE, the site of Cerro Blanco gained control over the other cities along the Moche and Chicama rivers. By about 400 CE, Moche-style ceramics and architecture could be found from the Lambayeque valley in northern coastal Peru to the Nepeña valley, some 250 kilometers south. Known for its public architecture and high degree of craft specialization, Cerro Blanco, a large site in the center of the state, became the capital of the Moche state. The site covered over 1 square kilometer and was dominated by the Huaca del Sol and the Huaca de la Luna (the Temple of the Sun and the Temple of the Moon), two massive platform mounds constructed out of mud bricks. The Huaca del Sol was one of the largest mounds ever built in the Americas, and recent excavations at the Huaca de la Luna have revealed beautiful polychrome murals and human sacrificial victims. Elite complexes of grand courts, low platforms, workshops, and living residences clustered around the two *huacas*.

The opulence and pageantry of elite life is also reflected in depictions on pottery and in the wealth of clothing, jewelry, and other items found in the burials of three priests at the Moche provincial site of Sipán in the Lambayeque valley. Lambayeque and the other valleys outside of the Moche-Chicama heartland were likely integrated into the state in different ways. Some groups were conquered and directly administered by centers that likely housed Moche officials, while other groups were nominally independent from the state but closely aligned with it through economic and political ties.

The Moche was not the only culture that flourished during this period. The Lima, Nazca, and Pukara cultures

were important regional powers elsewhere in the Andes. However, none of these groups rivaled Moche in size or degree of political centralization. Beginning around 600, Moche unity unraveled. Cerro Blanco was abandoned, and massive constructions at two cities, Pampa Grande in Lambayeque and Galindo in the Moche valley, suggests that the state broke up into at least two parts. While the reasons for Moche's decline remain unclear, shifts in the El Niño current at this time caused successive waves of long droughts and torrential rains. These environmental pressures, coupled perhaps with internal strife and conflict with the expanding Wari state, likely led to the breakup of the last remnants of the Moche state around 800.

Tiwanaku and Wari

Near the southern shore of Lake Titicaca (on the border of present-day Peru and Bolivia), the site of Tiwanaku became an important regional center by 350 CE. The city, oriented around a complex of mounds, sunken courtyards, megalithic stonework, and statues, appears to have been an important pilgrimage center. By about 550, Tiwanaku became the capital of a state that controlled much of the area around the Titicaca basin. Tiwanaku architecture and artifacts are found throughout the region, and there is some evidence that the state increased agricultural yields by resettling farmers and streamlining the network of irrigation canals and raised fields that were situated around the lake. Tiwanaku had a significant impact on the iconography of ceramics and textiles throughout northern Chile, northwestern Argentina, Bolivia, and Peru. This influence likely reflects the persuasiveness of their religion and the length of their trade networks rather than the incorporation of this area into a far-flung empire. Nonetheless, there are a few sites in the Moquegua (Peru) and, perhaps, Cochabamba (Bolivia) valleys that were established by Tiwanaku settlers in order to exploit lands at lower elevations.

By about 500, the site of Wari became the capital city of a state that we know by that name in the Ayacucho region of central Peru. While much of Wari's iconography was derived from Tiwanaku examples, the rise of the state appears to have been the culmination of local develop-

It is not central heating which makes his existence "unnatural," but his refusal to take an interest in the principles behind it. By being entirely dependent on science, yet closing his mind to it, he leads the life of an urban barbarian. • ARTHUR KOESTLER (1905–1983)

ments. Between 700 and 1000, the spread of Wari artifacts and architecture throughout Peru points to the increasing power of the polity. Wari appears to have taken control over some areas by creating regional administrative centers and shuffling political hierarchies, site locations, and economic systems to fit their needs. At least twenty administrative centers, the largest of which, Pikilacta, measured 800 meters on a side, may have been connected to the capital through a network of roads. Other areas of Peru, however, bear few or no traces of Wari domination, and it is likely that these areas enjoyed more independence from the state. The Wari state ended around 1000, and Tiwanaku followed soon after. Some scholars suggest that their demise can be linked to a multiple-year drought, though no definitive reasons for the states' collapse have been agreed upon.

The Chimu State and the Kingdoms of Peru

In the wake of the Tiwanaku and Wari collapse, regional polities filled the power vacuum left in the central Andes. The most complex of these societies was the Chimu state on Peru's north coast. By about 900, the state controlled about 1000 kilometers of coast from the city of Tumbes in the north to the Chillón valley in the south. The capital, Chan Chan, was a sprawling metropolis of more than 6 square kilometers. Ten palaces, each built by a successive Chimu king, dominated the heart of the city. A palace would serve as the administrative hub of the state during the ruler's lifetime, and then turn into a mausoleum to the ruler after his death. The Chimu also erected several regional centers in other areas, but their most impressive achievement may have been the construction of an inter-valley irrigation system of massive earthen canals that brought water to fields from as far as 70 kilometers away.

Although other polities during this period are often called kingdoms, they do not appear to have achieved sufficient size and complexity to be classified as states by most archaeologists. The Chincha culture of southern Peru, for example, was the preeminent trader along the Pacific coast, but the Chincha chose to control the sea instead of controlling the lands around them. The

Aymara kingdoms of Lake Titicaca were perhaps the most populous and powerful in the Andes, yet remained politically fragmented. Other cultures, such as the Ica, Wanka, Chiribaya, Inca, and Chanka, were important regional powers that also failed to develop into states. By at least the beginning of the fifteenth century, however, one of these groups, the Inca, consolidated the area around Cuzco into a state that eventually dominated Chimu and the kingdoms of Peru.

The Inca

The Inca empire, the largest pre-Hispanic state ever known in the Americas, stretched from the northern border of Ecuador to the present-day Chilean capital of Santiago. According to native accounts and archaeological evidence, the Inca expansion began in the first half of the fifteenth century. Using a mixture of diplomacy and force, the Inca managed to conquer much of the Andean cordillera in less than one hundred years. Cuzco, the capital, contained an assortment of palaces, temples, and residences arranged around two plazas in the city's center. Royal estates, like the site of Machu Picchu, dotted the landscape around the capital.

The Inca empire arranged conquered populations into four administrative quarters called Collasuyo, Antisuyu, Cuntisuyu, and Chinchasuyu. Although many local practices were often allowed to continue in conquered regions, the empire frequently made significant changes to a group's political organization, settlement locations, and economic specializations. The heart of imperial administration was a system of regional centers that were interconnected by a road system. Among the many purposes served by these facilities, the most important was the collection and redistribution of goods obtained by the state through the labor tax levied upon its subjects. The Inca labor tax was couched within an idiom of reciprocity by which the Incas would return services rendered to the state by hosting workers at feasts where prodigious amounts of food and corn beer were consumed.

By the beginning of the sixteenth century, Inca rulers strained to keep down rebellions throughout the overextended empire. Wave of epidemics and a war of succession

We have been God-like in our planned breeding of our domesticated plants and animals, but we have been rabbit-like in our unplanned breeding of ourselves. • ARNOLD TOYNBEE (1889–1975)

further weakened the Inca state in the 1520s. Francisco Pizarro (1475–1541) and a small band of Spanish adventurers delivered the deathblow to the empire by capturing Cuzco in 1533.

The Evolution of the Andean State

Along with Mesopotamia, China, Egypt, India, and Mesoamerica, the Andes is one of the locations to witness the emergence of the first states. While Andean examples share certain similarities with these other early states, we cannot understand the evolution of Andean social complexity without an appreciation for the region's landscapes and cultures. The Inca empire, for example, was adapted to the rugged mountains, desert coastal plain, and narrow river valleys of the Andes. The people of the Andes adapted to this environment by creating kin-based communities that united agricultural and herding settlements draped across highly compacted environmental zones. With their few outside needs provided by llama caravans that carried products from place to place, the challenge faced by Andean states was to find a means by which to coax these independent, self-sufficient groups to come under their control. The earliest societies in the Andes failed in their attempts to build states through the manipulation of religious ideologies alone. Successful states in the Andes, including the Inca, also had to rely on coercion and, more importantly, the redistribution of food, drink, and prestige objects. Clearly, to understand the evolution of the Andean state, one needs to understand the Andes.

Justin Jennings

See also Inca Empire; Spanish Empire

Further Reading

- Bawden, G. (1996). *The Moche*. Malden, MA: Blackwell Publishing.
 Bruhns, K. O. (1994). *Ancient South America*. New York: Cambridge University Press.
 Burger, R. L. (1995). *Chavin and the origins of Andean civilization*. London: Thames & Hudson.
 D'Altroy, T. N. (2002). *The Incas*. Malden, MA: Blackwell Publishing.
 Isbell, W. H., & McEwan, G. F. (Eds.). (1991). *Huari administrative struc-*

- tures: Prehistoric monumental architecture and state government*. Washington DC: Dumbarton Oaks.
 Kolata, A. L. (1993). *The Tiwanaku: Portrait of an Andean civilization*. Malden, MA: Blackwell Publishing.
 Laurencich Minelli, L. (Ed.). (2000). *The Inca world: The development of pre-Columbian Peru, A.D. 1000–1534*. Norman: University of Oklahoma Press.
 Moseley, M. E. (2001). *The Incas and their ancestors: The archaeology of Peru* (Rev. ed). New York: Thames & Hudson.
 Moseley, M. E., & Cordy-Collins, A. (Eds.). (1990). *The northern dynasties: Kingship and statecraft in Chimor*. Washington DC: Dumbarton Oaks.
 Pillsbury, J. (Ed.). (2001). *Moche art and archaeology in ancient Peru*. New Haven, CT: Yale University Press.
 Ross, J. F. (2002). First city in the new world? *Smithsonian*, 33(2), 56–64.
 Schreiber, K. J. (1992). *Wari imperialism in middle horizon Peru*. Ann Arbor: University of Michigan Press.

Animism

Animism is the name modern anthropologists gave to a very old set of ideas about how human beings and the natural world interact. The key concept is that animate and sometimes inanimate objects have a spiritual dimension that influences human well-being. The inhabitants of this invisible world of spirits behave much like ourselves, and interact with one another and with the visible world constantly. The spirits sometimes helped and sometimes defeated human purposes and hopes. Consequently, humans needed to maintain good relations with them, learn their wishes, and appease their anger whenever possible.

This idea probably dates back to the time when language developed fully among our ancestors, permitting them to create agreed-upon meanings to guide everyday behavior. And once they agreed on the importance of good relations with invisible spirits, human foraging bands probably came to rely on specialists who knew how to enter the spirit world at will and report back what the spirits wanted. Many anthropologists think that what Siberian shamans did among groups of hunters in the nineteenth century descended from and, at least loosely, resembled very ancient practices. At any rate, ritual singing and dancing allowed shamans to enter into

Andamanese Beliefs about the Soul

The Andamanese are the indigenous foraging people of the Andaman Islands of South Asia. Their traditional belief system is animistic as indicated by the nature of their belief in the soul.

The nearest approach to our notion of a soul that the natives possess is their belief concerning the double or reflection seen in a mirror. In the Northern tribes the word *ot-jumulo* means “reflection,” and also “shadow,” and is also nowadays applied to a photograph. The word *ot-jumu*, in the same languages, means “a dream” or “to dream.” We may perhaps translate the word *ot-jumulo* as meaning “soul.” In the Aka-Bea language *ot-yolo* is “reflection,” while there is a different word, *ot-diya* or *ot-lere*, for “shadow,” and neither of the words has any connection with the word “dream,” which is *taraba*. Mr. Man translates the word *ot-yolo* as “soul.”

The fact that the words for dream and reflection, double or shadow are from the same root in the Northern languages is of interest. Dreams are sometimes explained by saying that the sleeper’s double (*ot-jumulo*) has left his body and is wandering elsewhere. Dreams are regarded as being veridical, or at any rate, as having importance. One man told me how, in a dream the night before, his *ot-jumulo* had travelled from where we were to his own country and

had there seen the death of the baby of a woman of his own tribe. He was fully convinced that the baby must really have died.

An Andamanese will never, or only with the very greatest reluctance, awaken another from sleep. One explanation of this that was given to me was that the *ot-jumulo* or double of the sleeper may be wandering far from his body, and to waken him suddenly might cause him to be ill.

The principle on which dreams are interpreted is a very simple one. All unpleasant dreams are bad, all pleasant ones are good. The natives believe that sickness is often caused by dreams. A man in the early stages of an attack of fever, for instance, may have a bad dream. When the fever develops he explains it as due to the dream. If a man has a painful dream he will often not venture out of the camp the following day, but will stay at home until the effect has worn off. The natives believe that they can communicate in dreams with the spirits, but the power to do this regularly is the privilege of certain special individuals, known as *oko-jumu* (dreamers). However, an ordinary individual may occasionally have dreams of this kind.

Source: Radcliffe-Brown, A.R. (1922). *The Andaman Islanders: A study in social anthropology*. (pp. 166–167). Cambridge, UK: Cambridge University Press.

trance at will; and when they returned to normal consciousness, they regularly explained what the spirits wished or intended. Ordinary people could then go about their daily tasks reassured, or, as the case might be, devote time and effort to rituals designed to appease or drive evil spirits away.

The idea of an invisible spirit world parallel to the material world of sense almost certainly spread with the wandering Paleolithic bands that occupied almost all the habitable lands of the earth between about 100,000 and 10,000 years ago. At any rate, all the diverse and remote hunters and gatherers whom anthropologists began to study in the nineteenth century believed that invisible spirits surrounded them and had a lot to do with everything that happened.

What made animism plausible was the experience of dreaming. A sleeping person might remember strange sights and encounters, even with dead persons. It seemed obvious that when humans were asleep something invisible—their spirits—could and did travel about among other disembodied spirits. Moreover, breath offered a clear example of an invisible something—a spirit—essential to life, which departed from dying persons permanently, thus joining, or rejoining, other disembodied spirits.

Trance, too, was interpreted as arising when a person’s spirit departed temporarily and returned with news from the spirit world. Illness could also be attributed to an evil spirit that, by invading the body, upset normal health. Rituals for driving out such spirits and for defeating other

spirits that were interfering with particular human hopes and purposes became central to what may be called animistic religion.

Surges of unusual excitement and extraordinary cooperative efforts were also interpreted as examples of how a single spirit might enter into the community as a whole or those persons who bore the brunt of common exertion, whether they were defending their home territory against an invading human band, stalking and killing a dangerous animal, or initiating young people into their adult roles by secret and solemn rituals. These and other occasions brought people together emotionally; and the excitement that sustained commonality could be attributed to a spirit shared, at least temporarily, by all.

Details of how different peoples attempted to control their interaction with the spirit world differed endlessly from place to place and must have altered across time too, so that we ought not to assume that recent practices accurately replicated ancient patterns even among Siberian hunters. But it is worth recognizing that animism in all its innumerable local variations endured far longer than successor religions have done. In fact, animism still pervades a great deal of common speech and thinking.

Athletes and businessmen often invoke “team spirit”; musicians and actors hope for an “inspired” performance. And we all admire a cheerful “spirit,” whenever we meet such a person.

For millennia, management of relations with the spirit world in the light of animistic ideas and techniques sustained human communities in good times and bad. It made whatever happened intelligible and within limits curable as well. Every surprise and disappointment was believed to be the work of one or more spirits; and when matters were sufficiently critical, customary rituals could always be mobilized to find out exactly what kind of spirits were interfering and what sort of appeasement or change of human behavior might solve the problem.

A belief system that explained so much and served so many peoples across so many generations deserves serious respect. It was humankind’s earliest effort to work out a worldview, uniting in an undifferentiated whole what later separated into science and religion. Everything later

thinkers did to elaborate human knowledge took off from animism, modifying and eventually abandoning it; and it is not really surprising that all of us still sometimes fall back on animistic phrases and habits of thought in everyday life.

William H. McNeill

See also Shamanism; Totemism

Further Reading

- Tylor, E. B. (1871). *Primitive culture*. New York: Harper.
 Jensen, A. E. (1963). *Myth and cult among primitive peoples*. Chicago: University of Chicago Press.
 Lowie, R. H. (1970). *Primitive religion*. New York: Liveright.
 Eliade, M. (1964). *Shamanism: Archaic techniques of ecstasy*. New York: Bollingen Foundation.

Anthropology

The global scope and trans-epochal sweep of anthropology bespeak close affinities with world history. Yet, just what anthropology has to offer world history is far from straightforward. In no small part, this is because anthropology, even more than most disciplines, is a sutured and unstable bundle of paradigmatic traditions, famously involving studies of human biology and primate origins (in biological anthropology), a significant focus on the Neolithic era across the globe (in archaeology), detailed studies of daily life, particularly in small-scale societies (in sociocultural anthropology), and formal analyses of language in all its known diversity (in linguistic anthropology). Work in these different quadrants has distinct, and in some cases antithetical, implications for world history.

Anthropology as a Discipline

Though no single starting point can be found for sustained inquiry into the questions asked by anthropology, anthropology coalesced as a discipline only in the final

As the traveler who has once been from home is wiser than he who has never left his own doorstep, so a knowledge of one other culture should sharpen our ability to scrutinize more steadily, to appreciate more lovingly, our own. • MARGARET MEAD (1901–1978)

decades of the nineteenth century, as part of a larger process of disciplinary differentiation and institutionalization. Within this larger process, the composition of anthropology was shaped to a significant degree by “the revolution in human time,” itself located at the end of the 1850s and beginning of the 1860s. The new understanding of the length of human existence, as vastly greater than the biblical chronology of some six thousand years, undermined the then active scholarly project of reconstructing the complete family tree of humankind, from the first begat of the original hetero couple (Adam and Eve) to the distribution of peoples across the entire globe in the present.

In its place, scholars pursued a “conjectural” account of humanity’s “progress” over the vast expanse of human time, through a singular sequence of generalized stages, from primordial savagery to the telos of civilization. Within this new research program, living “primitives” and archaeological remains (both skeletal and artifactual) came to be seen as the best sources of evidence for reconstructing the prehistoric and precivilized segment of this sequence, given the absence of written records from this period of time-development.

In the earlier project of reconstructing the complete family tree of all the world’s peoples, the study of language had played a prominent role, in the form of philology. The latter’s great prestige positioned language as a significant focus of the new social evolutionary program as well. Within the new research program, however, the interest in language shifted from finding cognates that demonstrated a common source language (a node on the family tree) to establishing an authoritative basis for ranking all languages on a single scale of development.

The new understanding of human time contributed in one other important way to the formation of the new discipline of anthropology: It opened the door to a vast expansion of research on “the races of mankind.” Within the tight temporal confines of the biblical chronology, a coherent exposition of independent racial types required the doctrine of polygenism (the idea that each race had been created separately by God), but most scholars in Europe and North America had rejected this doctrine

because it was held to contradict the biblical account of the creation of humankind. The new chronology, by contrast, offered no such barrier to the idea of independent racial types, and indeed it provided a span of time that seemed more than ample for the formation of racial divisions, even if all the races had a common origin.

Finally, this pair of new scientific pursuits—the reconstruction of human prehistory and the study of human racial differences—were linked in at least two important ways. First, they relied on common sources of evidence—archaeological remains and accounts of living “primitives.” This common (evidentiary) denominator did much to make these areas of research mutually intelligible, thereby facilitating their cohabitation in a single discipline. Second, these pursuits were linked by service to a common master: Empire. What this facilitated was less scholarly communication between these areas of research than their “hybridization,” that is, an ad hoc intermingling of racial and social evolutionary notions in the common cause of legitimating conquest and domination.

Given the breadth of anthropology as it coalesced in these ways, it is not surprising that few, if any, Victorian scholars were “preadapted” to carry out original research in all of the discipline’s many branches. It is a great irony, however, that one of the very first scholars who was prodigious enough to do so—Franz Boas (1858–1942)—was also one of the last. That Boas made significant contributions to all four of anthropology’s “quadrants” is a commonplace of introductory courses in anthropology, but what is typically elided in these accounts is that his contributions to biological (or in his terms, *physical*) anthropology were primarily negative. Boas’s painstaking research on racial kinds produced results that, again and again, raised fundamental questions about the validity of the concept of race. So too, Boas’s work on social evolution ended up challenging the idea that living others could be seen as exemplars of prehistoric life. This critical response to social evolutionary theory was particularly strong in the case of language, with Boas and his students providing powerful demonstrations that all observable human languages were equally “evolved.” Thus, as much as Boas played a central role in the building of anthro-

Anthropology is the most humanistic of the sciences and the most scientific of the humanities. • ALFRED L. KROEBER (1876–1960)

pology, he also animated the discipline's characteristic centrifugal tendencies.

World History and Anthropology

In the last half century, as world history has emerged in tension with disciplinary history's disproportionate focus on Europe and the West, world history has looked to anthropology for two primary reasons: (1) to bring into history knowledge of Africa, Asia, Oceania, and the Native peoples of the Americas, and (2) to gain a significant degree of temporal depth, by moving into prehistoric time. What has been insufficiently recognized, however, is that in consulting anthropology for these reasons, world history has drawn on bodies of "anthropological" knowledge that are shaped by quite different, and often antithetical, theoretical schemas or paradigms. Most Neolithic archaeology, for instance, relies upon and incorporates a social evolutionary framework; as such, this body of "anthropological" knowledge supports the perception of there being an overall trajectory to human existence through time. It thereby complements and reinforces disciplinary history's entrenched assumption that the history of Europe exemplifies a universal passage from "traditional" to "modern" social forms: a passage that will sooner or later occur everywhere else, in much the same way. By contrast, most post-Boasian cultural anthropology incorporates and supports the rejection of social evolutionary models. This body of "anthropological" knowledge characteristically speaks against the validity of such analytic categories as "advancement" and "civilization," while encouraging the *provincializing* of Europe and the West (cf. Chakrabarty 2000). When this knowledge is brought into disciplinary history, it becomes quite difficult to hold on to a single, coherent narrative of the human career through time. Similarly, if more abstractly, the radical relativizing that is characteristic of post-Boasian cultural anthropology—its insistent practice of doubting the absoluteness of the familiar—discomfits disciplinary history's common-sense realism.

In sum, recognizing the complexity of the discipline we call anthropology should caution us against the view that

anthropological knowledge can, in any simple way, be brought into history to provide greater coverage of human time and space. Such interdisciplinary borrowing must be alert to the diverse paradigmatic traditions at work in anthropology, as well as their quite different relationships to disciplinary history's own theoretical schemas.

Daniel A. Segal

See also Archaeology; Comparative Ethnology; Cultural Ecology; Paleoanthropology; Social Sciences

Further Reading

- Chakrabarty, D. (2000). *Provincializing Europe: Postcolonial thought and historical difference*. Princeton, NJ: Princeton University Press.
- Segal, D., & Yanagisako, S. (Eds.). (2004). *Unwrapping the sacred bundle: Essays on the disciplining of anthropology*. Durham, NC: Duke University Press.
- Stocking, G. (1968). *Race, culture, and evolution: Essays in the history of anthropology*. New York: Free Press.
- Stocking, G. (1987). *Victorian anthropology*. New York: Free Press.
- Trautmann, T. (1987). *Lewis Henry Morgan and the invention of kinship*. Berkeley: University of California Press.

Anthroposphere

The concept of the anthroposphere, like the concept of the biosphere from which it is derived, was first introduced in the natural sciences in the late 1980s and early 1990s. The term refers to that part of the biosphere that is affected by humans—just as the part of the biosphere that is affected by elephants could be called the elephantsphere. Such terms are all predicated on the idea that there is a two-way relationship between every living species and the environment in which it finds itself living. All life is part of an ecosystem, all ecosystems together constitute the biosphere—the total configuration of living things interacting with one another and with nonliving things. Every form of life continuously affects, and is affected by, its ecosystem—and human life is no exception.

"Anthroposphere" is an open concept, containing suggestions for research and reflection, sensitizing us to the

“It’s a question of discipline,” the little prince told me later on. “When you’ve finished washing and dressing each morning, you must tend your planet.” • ANTOINE DE SAINT-EXUPÉRY (1900–1944)

problem of how far and how deeply the impact of human activity has penetrated into the biosphere. By reminding us that human societies are embedded in ecosystems, the concept helps to bridge the gap between the natural sciences and the social sciences and humanities. Moreover, it can be used to formulate and elucidate the simple but far-reaching proposition that many trends and events in human history, from its earliest beginnings to the present day, can be seen as functions or manifestations of the expanding anthroposphere.

Extensive and Intensive Growth

The anthroposphere emerged with the evolutionary transition from hominids to humans. Initially, expansion must have been very slow and replete with regressions. In the long run, however, the human population grew in numbers from modest beginnings to today’s 6 billion, and it spread from its origins in northeastern Africa over increasingly more territory, until it was a significant presence on every continent except Antarctica. These two forms of expansion together represent extensive growth. Extensive growth can be defined as sheer extension of biomass, physically and geographically. It is a matter of proliferation: more of the same, reaching farther and farther—like rabbits in Australia or cancer cells in a human body.

In the expanding anthroposphere, extensive growth has always been accompanied, and in all likelihood even driven, by intensive growth. If extensive growth can be defined in terms of more and more, intensive growth refers to the emergence of something new. In the case of the anthroposphere, it arises from the human capacity to find new ways of exploiting energy and matter by collecting and processing new information. If the key word for extensive growth is proliferation, the key word for intensive growth is differentiation—its primary effect always being to add new and different items to an existing stock or repertoire. Once an innovation has been accepted, it may then be copied in multiple forms and grow extensively. Thus intensive growth and extensive growth intermingle. (It should be noted that, like the concept of

anthroposphere and other central concepts used in this entry such as agrarianization and industrialization, the concepts of intensive and extensive growth are intended not to express any value judgments.)

Key Role of Collective and Intergenerational Learning

Human life, like all life, consists of specific combinations of matter and energy structured and directed by information. Two particular features distinguish human life from other forms of life and hence are important in understanding the anthroposphere. First, humans rely much more strongly on learned information than any other species. Second, most of the information that human individuals learn comes from other individuals: It is information that has been pooled, shared, transmitted—it is, in a word, culture.

The most important vehicle for human communication is language, composed of symbols. Symbols therefore constitute a vital dimension of the anthroposphere. Information conveyed in symbols can be handed down from generation to generation and used to aggregate and organize matter and energy in the service of human groups, thus strengthening the position of those groups in the biosphere. The development of language made it possible for humans to adopt new forms of behavior that made them increasingly different from other animals. A strong reason for maintaining the new forms of behavior must have been that they gave humans the advantage of greater power over those other animals.

This seems to be one of the clues for understanding the course of the long-term development of the anthroposphere. Again and again, innovations occurred, like mutations in biological evolution, and again and again, of those innovations, those tended to be retained that helped increase the power of the groups that maintained them. As humans increased their power through such innovations as language and the mastery of fire, other animals inevitably declined in power. Some became extinct, while all surviving species had to adjust their ways of life to the newly gained superiority of human groups. At later stages, similar shifts in power relations

Hunger, poverty, environmental degradation, economic instability, unemployment, chronic disease, drug addiction, and war, for example, persist in spite of the analytical ability and technical brilliance that have been directed toward eradicating them. . . .

occurred within human society itself, compelling defeated groups to adjust to the dominance of more successful groups. Many innovations in the history of human culture were adjustments to power losses.

Differentiation: Regimes

The domestication of fire culminated in the establishment of what may be called a monopoly—a monopoly of power that was held by the human species and in which eventually all human communities all over the world shared. The formation of this monopoly affected the relations between humans and the nonhuman world so deeply that we may call it the first great ecological transformation brought about by humans, which was followed much later by two similar transformations—generally known as the agricultural and industrial revolutions, and better characterized by the long-term processes of agrarianization and industrialization.

Each of the three transformations marked the formation of a new socioecological regime (that is, a form of social organization and a way of life attuned to a specific level of control over matter and energy): the fire regime, the agrarian regime, and the industrial regime, respectively marked by the utilization of fire and elementary tools, the rise and spread of agriculture and animal husbandry, and the rise and spread of large-scale modern industry. The later regimes did not make the earlier regimes obsolete; rather, they absorbed them and, in so doing, transformed them.

With each new regime, new monopolies of human power were formed, opening up new opportunities for control, security, comfort, and wealth. All these benefits, however, involved costs as well. This was already evident when the fire regime exerted pressure on people to collect fuel and to tend their hearths; it became even more evident when the strains of the agrarian and industrial regimes were added to the fire regime.

The Four Phases of Human History

The most convenient backdrop for writing history is undoubtedly chronology. When it comes to dealing with

such encompassing long-term processes as the expansion of the anthroposphere, however, one can also speak fruitfully in terms of broad phases. By taking as benchmarks the successive formation of the three major socioecological regimes, we can distinguish four phases in human history:

1. The phase before the domestication of fire. In this phase all human groups subsisted on foraging; there were no groups with fire or cultivated fields or factories.
2. The phase when there were at least some groups with fire, but none yet with fields or factories.
3. The phase when all human groups had fire and some also had cultivated fields, but none had factories.
4. The phase we have reached today, when all human societies not only have fire but are also using products of fields and factories.

Needless to say, it would make a great deal of difference for a group of foragers whether it found itself living in the first, second, third, or fourth phase, as in the first it would come in contact only with other groups with similar lifeways. In any of the subsequent phases, however, it might come in contact with groups whose lifeways made them more powerful than the foragers. As a further elaboration of this simple model of four phases, we may subdivide each phase into three subphases: a phase when there was no group with the defining technology (fire, agriculture, or industry), a phase when there were both groups with and groups without the defining technology, and a phase when there were only groups with the defining technology. Making these finer gradations in the four phases raises the intriguing problem of how to account for the transitions from one subphase to the next. How was a particular regime first established, how did it spread, and—most intriguing—how did it become universal?

The last question in particular brings out the world-historical import of the phase model. Besides being applicable to the three major socioecological regimes, the questions also apply to the adoption of other innovations, such as metallurgy, writing, and the development of cities.

They will yield only as we reclaim our intuition, stop casting blame, see the system as the source of its own problems, and find courage to restructure it. • DONELLA MEADOWS (1941–2001)

Agrarianization

The history of the past ten thousand years may be read as a series of events accompanying the agrarianization of the anthroposphere—a process whereby human groups extended the domain of agriculture and animal husbandry all over the world, and in so doing made themselves increasingly more dependent upon this very mode of production.

The agrarian way of life was based on a new human monopoly—the monopoly of control over pieces of territory (fields)—in which people more or less successfully subjected vegetation and animal life to a human-directed regime. The result was twofold: elimination of competing species (parasites and predators) and concentration of resources and people in ever greater densities. Although agrarian regimes sometimes suffered decline, their overall tendency was to expand.

Expansion did not take place in a uniform and even fashion. In fact, the unevenness of its development was a structural feature of agrarianization. From its very beginnings, agrarianization was marked by differentiation—initially between people who had adopted agriculture and people who had not. Eventually, in the phase of industrialization, the last nonagrarian peoples vanished, and with them this primary form of differentiation.

Still, various forms of differentiation within the agrarian (or, rather, agrarianizing) world continued. Some agrarian societies went much further than others in harnessing matter and energy for human purposes, for example, by means of irrigation or plowing. In societies that grew accustomed to higher yields of agrarian production, competition to control the wealth thus generated usually led to social stratification—the formation of different social strata marked by huge inequalities in property, privilege, and prestige. Another closely related form of differentiation typical of this phase was cultural diversification. In Mesopotamia, the Indus valley, northeastern China, Egypt, the Mediterranean basin, Mexico, the Andes region, and elsewhere, agrarian empires developed that are still known for their distinct cultures, each with its own dominant language, system of writing, religion, architecture, dress, methods of food production, and eat-

ing habits. In the heyday of agrarianization, the anthroposphere was marked by conspicuous differences in culture or civilization—differences resulting to a large extent from the interplay of gains in power by some groups and accommodation to power losses by others.

Industrialization

Around 1750 the immense deposits of fuel energy that had lain virtually unused by any living species began to be exploited for human purposes. A series of innovations provided the technical means for tapping these supplies and for using them to generate heat and mechanical motion. No longer were people completely dependent on the flows of energy that reach the earth from the sun and that are partly converted into vegetation by means of photosynthesis. Just as at one time humans had been able to strengthen their position in the biosphere by learning to control fire, they now learned the art of using fire to exploit the energy contained in coal, oil, and gas.

These innovations stimulated great accelerations in extensive growth. According to a rough estimate, the total human population must have reached one million at some time in the Paleolithic, ten million at the time when agrarianization began, a hundred million during the first stages of urbanization, a thousand million at the beginning of industrialization. The next tenfold increase, to ten billion, is expected to be completed within a few generations. Along with the increase in human numbers, networks of production, transport, and communication have grown worldwide so that the anthroposphere is now truly global. Universal acceptance of a common system of time measurement, based on Greenwich mean time, is a telling example of how common standards of orientation are spreading all over the world. At the same time, the inequalities between and within human societies that arose as structural features of advanced agrarian regimes persist in industrial society. Those inequalities now also exert disturbing global pressures, as do the many ecological problems such as global warming, which are generated by the way in which the anthroposphere is currently expanding.



Toward a Synthesis

In the eras of agrarianization and industrialization, the anthroposphere gave rise to social regimes that were only indirectly related to the natural environment. The money regime and the time regime may serve as illustrations. Both exemplify how people turned their attention away from the natural environment, and from ecological issues, toward a more purely social aspect of the anthroposphere, represented by the clock and the calendar or the purse and the bank account. Those regimes thus supported the illusion that the anthroposphere is autonomous. That illusion was furthered by the concomitant intellectual tendency to separate the social sciences from the natural sciences and to cultivate discrete and seemingly autonomous social-science disciplines, such as psychology and sociology.

Today there is a growing awareness that as the anthroposphere encroaches upon ever larger portions of the biosphere, it absorbs more and more nonhuman elements. The notion of ecological interdependence is gaining ground. A classical theme in the social sciences has been the interweaving of planned actions and unplanned consequences. All human activities have unintended consequences; recognition of that fact is now being combined with the insight that the anthroposphere (itself the product of unplanned evolutionary processes) has become an agent in the evolution of the biosphere. Human life has become a formidable coevolutionary force. Sociocultural processes are channeling and steering the course of biological evolution.

Without using the word *anthroposphere*, the world historians William and John McNeill, the ecological historian Alfred Crosby, the biologist Jared Diamond, and several others have shown that it is possible to write about the history of the anthroposphere. Further theoretical inspiration can be drawn from the traditions of sociology and anthropology inaugurated by Auguste Comte and Herbert Spencer and continued by such scholars as Norbert Elias and Marvin Harris, in combination with the geological and biological study of the biosphere as launched by Vladimir Vernadsky in the early twentieth century and taken up again by Lynn Margulis

and James Lovelock from the 1970s onward. The names mentioned are but a few among many authors whose works contribute to our understanding of the history and dynamics of the anthroposphere.

Johan Goudsblom

Further Reading

- Baccini, P., & Brunner, P. H. (1991). *Metabolism of the anthroposphere*. Berlin, Germany: Springer Verlag.
- Bailes, K. E. (1998). *Science and Russian culture in an age of revolutions: V. I. Vernadsky and his scientific school, 1863–1945*. Bloomington: Indiana University Press.
- Crosby, A. W. (1986). *Ecological imperialism. The biological expansion of Europe, 900–1900*. Cambridge, UK: Cambridge University Press.
- Christian, D. (2004). *Maps of time: An introduction to big history*. Berkeley and Los Angeles: University of California Press.
- De Vries, B., & Goudsblom, J. (Eds.). (2002). *Mappae Mundi: Humans and their habitats in a long-term socio-ecological perspective*. Amsterdam: Amsterdam University Press.
- Diamond, J. (1997). *Guns, germs and steel. The fates of human societies*. New York: Random House.
- Elias, N. (1991). *The symbol theory*. London: Sage.
- Elvin, M. (2004). *The retreat of the elephants. An environmental history of China*. New Haven: Yale University Press.
- Goudsblom, J. (1992). *Fire and civilization*. London: Allen Lane.
- Goudsblom, J., Jones, E. L., & Mennell, S. J. (1996). *The course of human history: Economic growth, social process, and civilization*. Armonk, NY: M. E. Sharpe.
- Margulis, L., Matthews, C., & Haselton, A. (2000). *Environmental evolution: Effects of the origin and evolution of life on planet Earth*. Cambridge, MA: MIT Press.
- McNeill, J. R. (2000). *Something new under the sun: An environmental history of the twentieth century*. New York: W. W. Norton & Company.
- McNeill, J. R., & McNeill, W. H. (2003). *The human web. A bird's-eye view of world history*. New York: W. W. Norton & Company.
- McNeill, W. H. (1976). *Plagues and peoples*. Garden City, NY: Doubleday.
- Samson, P. R., & Pitt, D. (Eds.). (1999). *The biosphere and noosphere reader: Global environment, society and change*. London: Routledge.
- Sieferle, R. (2001). *The subterranean forest. Energy systems and the industrial revolution*. Cambridge UK: The White Horse Press.
- Simmons, I. G. (1996). *Changing the face of the earth: Culture, environment, history* (2nd ed.). Oxford, UK: Blackwell.
- Smil, V. (1997). *Cycles of life: Civilization and the biosphere*. New York: Scientific American Library.
- Trudgill, S. T. (2001). *The terrestrial biosphere: Environmental change, ecosystem science, attitudes and values*. Upper Saddle River, NJ: Prentice Hall.
- Turner, B. L. II, Clark, W. C., Kates, R. W., Richards, J. F., Mathews, J. T., & Meyer, W. B. (Eds.). (1990). *The earth as transformed by human action: Global and regional changes in the biosphere over the past 300 years*. Cambridge, UK: Cambridge University Press.
- Vernadsky, V. I. (1998). *The biosphere*. New York: Copernicus. (Original work published in Russian in 1926).

Segregation is the adultery of an illicit intercourse between injustice and immorality. • MARTIN LUTHER KING JR. (1929–1968)

Apartheid in South Africa

Apartheid is an Afrikaans word meaning “apartness” or “separateness” and refers to a system of racial segregation practiced by the white minority against a black majority in the Republic of South Africa from 1948 to 1991. In the late twentieth and early twenty-first centuries the term has acquired a generic meaning, much like *holocaust* and *diaspora*, and is used to describe other situations around the world in which one group of people deny basic human and civil rights to another group based on gender, race, or sexual orientation. Thus, one hears of apartheid against women in Taliban-controlled Afghanistan, apartheid against Palestinians in areas controlled by Israel, and apartheid against homosexuals in various countries.

Early Years

The notions of white supremacy and racial segregation came to South Africa with the first European settlers. The Dutch East India Company imported slaves from East Africa and Malaysia soon after establishing a small colony at the Cape of Good Hope in 1652. Although the British abolished slavery shortly after annexing the Cape Colony in 1806, they maintained various institutions and practices that guaranteed white political and economic control over the black majority. By the early twentieth century Britain controlled all of modern-day South Africa, with political power nearly entirely in the hands of people of European descent. With the Act of Union in 1910, South Africa gained dominion status within the British empire and limited self-rule. Between 1910 and 1948 Union governments passed numerous laws that severely restricted black rights. Blacks were denied equal citizenship through such measures as pass laws (laws requiring blacks to carry identification pass books), job reservations, restricted voting rolls, and the right to form unions. The Native Areas Acts of 1913 and 1936 relegated the African majority to native reserves, forcing roughly 85 to 90 per-

cent of the population in theory (although never in fact) to live on less than 14 percent of the land. The remaining 86 percent of the land was reserved for whites only.

Thus, when Daniel F. Malan (1874–1959) and his Afrikaner Nationalist Party won the 1948 general election on a platform that officially endorsed apartheid, the concept was not alien to either the white or black populations. Ironically, at a time when Europe and North America were ending legalized discrimination against racial minorities, white South Africans began to implement one of the harshest, most total systems of racial discrimination in world history.

Structure

The philosophy of apartheid was based on four major points: the “separate development” of the four official racial groups in the country; white control of every aspect of government and society; white interests overruling black interests, with no requirement to provide equal facilities for all groups; and the categorization of “whites” (people of European descent) as a single nation and Africans as members of several distinct nations or potential nations.

Under apartheid there were four official racial groups. The Africans (sometimes designated as Bantu) made up about 78 percent of the total population and, although of common ancestry, were divided into nine distinct nations: Zulu, Xhosa, Venda, Tsonga, Pedi, Tswana, Swazi, Ndebele, and Sotho. *Colored* was the name given to people of mixed black, Malayan, and white descent who traced their origins to the earliest days of European settlement. Asians, mainly of Indian ancestry, were a third official group. Coloreds and Asians made up roughly 10 percent of the population. The remaining 12 or 13 percent were whites, with about 60 percent of Dutch descent and 40 percent from the British Isles, although immigrants from nearly every European nation were represented in this single “nation.”

The apartheid system was sometimes described as having two aspects, so-called grand and petty apartheid. Grand apartheid refers to those racially discriminatory policies that related to land and politics. Petty apartheid

As I would not be a slave, so I would not be a master. This expresses my idea of Democracy. Whatever differs from this, to the extent of the difference, is no Democracy. • ABRAHAM LINCOLN (1809–1865)

refers to the everyday examples of racial discrimination, such as marriage restrictions and segregated facilities and amenities, housing, jobs, transportation, and education. During the first decade following the 1948 elections, apartheid policies developed in a rather crude manner under the label of *baaskap*. This Afrikaans term roughly translates as “mastery,” or white supremacy, with a very explicit notion of a master (the “boss”) and servant relationship between white and black. The Afrikaners’ obsession with cultural survival and almost pathological fear of the *swart gevaar* (“black peril”) resulted in a series of laws enforcing strict segregation and white supremacy. These included the Prohibition of Mixed Marriages Act (1949); the Immorality Act (1950), which made sex between people of different racial groups illegal; the Population Registration Act (1950), requiring everyone to be registered in one of the official groups; the Group Areas Act (1950); the Suppression of Communism Act (1950), which effectively identified anyone who opposed



This is the town of Graaff-Reinet in South Africa and clearly shows how apartheid looked in practice. In the center is the white town of Graaff-Reinet. Set off in the upper left and right are smaller settlements housing coloreds and Africans.

the government as a Communist; the Reservation of Separate Amenities Act (1953); and the Bantu Education Act (1953). This last denied government support to private and church-run (often mission) schools and placed the entire national education system under the government’s direction, resulting in a significant decline in the quality of black education.

The Baaskap Period and Hendrik Verwoerd

During this *baaskap* period, the apartheid government set about enforcing a strict separation between the races in urban areas. Thousands of Africans, Asians, and coloreds were forcibly removed from so-called white areas and relocated to dreary, desolate townships outside the cities. These harsh measures are best exemplified by the forced removal of an entire colored community living in “District Six” in Cape Town, and the destruction of the African township of Sophiatown, near Johannesburg, which was then rebuilt as a white town, to be renamed Triomf (Afrikaans: “Triumph”). It is estimated that from the passage of the Group Areas Act in 1950 to the end of forced removals in the late 1980s, more than 3.5 million people were forcibly relocated by the government.

In 1958 Hendrik Verwoerd (1901–1966) became prime minister. He is remembered as the chief architect of apartheid. Under Verwoerd, apartheid evolved away from *baaskap* and toward a more sophisticated racist policy called separate development. Under separate development, each of the nine African (or Bantu) groups was to have its own nation, or Bantustan, located roughly on the 14 percent of land set aside in the Native Land Acts of 1913 and 1936. The remaining 86 percent of the country was reserved for whites only; that land included the best farmland, the main urban areas, and major mineral deposits and mines. The underlying philosophy of separate development was that Africans should return to their independent homeland, and there develop socially, economically, culturally, and politically according to their own freely determined desires. The argument went that in this way, all South African nations—the white “nation” and the nine black “nations”—would

have self-determination and not be forced to live under alien rule.

Self-determination only began, however, once the Africans entered their homeland. They were not given a choice of whether to move or not, though many of them had lived for generations in cities and never been near their designated homeland. Furthermore, many Africans came from diverse ancestries, with (for example) a Xhosa grandfather and a Sotho grandmother, or some other combination of the nine different groups. Now, however, they found themselves with a pass book that officially labeled them as belonging to one group or another and as citizens of that homeland. They were aliens in South Africa—a country that theoretically now had a white majority population.

Verwoerd's policy of "separate development" raised apartheid to a new level of systematized racism. This began the era of truly "grand" apartheid: Not only did the petty racism of "whites only" park benches and beaches affected everyday life, now every moment of one's life was determined by one's racial classification, from racially designated hospitals for one's birth to racially designated cemeteries for one's burial. Coloreds, Asians, and Africans could not move freely about the country, could not freely choose their place of residence or employment, and could not vote or own land. African workers in cities and on the mines were considered transients, and had to return regularly to their "homeland." Only those with permits could live in "white" areas, and they were not allowed to bring with them their spouse or family, thus contributing to the breakdown of African family life. Blacks were forced to live in African, Asian, or colored townships on the perimeter of urban areas. Africans, coloreds, and Asians (but not whites) were required at all times to carry pass books, known as "Books of Life" because they contained all of a person's identity, including marriage and driver's licenses, birth certificate, and work permit.

In 1963 the apartheid regime granted the first of the Bantustans, the Transkei (a Xhosa "homeland"), limited self-government. Between 1976 and 1981, the Transkei, Bophuthatswana (Tswana), Venda (Venda), and Ciskei

The Natives' Land Act of 1913

This act provided the basis for the separation of whites and indigenous Africans in rural South Africa.

To make further provision as to the purchase and leasing of Land by Natives and other Persons in the several parts of the Union and for other purposes in connection with the ownership and occupation of Land by Natives and other Persons.

Be it enacted by the King's Most Excellent Majesty, the Senate and the House of Assembly of the Union of South Africa, as follows:

1. From and after the commencement of this Act, land outside the scheduled native areas shall, until Parliament, acting upon the report of the commission appointed under this Act, shall have made other provision, be subjected to the following provisions, that is to say:

Except with the approval of the Governor-General—

a) a native shall not enter into any agreement or transaction for the purchase, hire, or other acquisition from a person other than a native, of any such land or of any right thereto, interest therein, or servitude thereover; and

b) a person other than a native shall not enter into any agreement or transaction for the purchase, hire, or other acquisition from a native of any such land or of any right thereto, interest therein, or servitude thereover.

2. From and after the commencement of this Act, no person other than a native shall purchase, hire or in any other manner whatever acquire any land in a scheduled native area or enter into any agreement or transaction for the purchase, hire or other acquisition, direct or indirect, of any such land or of any right thereto or interest therein or servitude thereover, except with the approval of the Governor-General.

Source: The Natives' Land Act, 1913. Retrieved from <http://www.polity.org.za/html/govdocs/legislation/misc/nla1913.html>



This Namibia monument is for fallen SWAPO soldiers who were killed by the South Africans at the beginning of the independence process on 1 April 1989.

(Xhosa) were granted “independence” by the government, although no other government in the world ever recognized these “nations.” KwaZulu, KwaNdebele, Lebowa, KaNgwane, Gazankulu, and Qwa Qwa were declared “self-governing” in the 1970s. None of the homelands were ever economically viable. They consisted mostly of poor, eroded land; few had any mineral deposits of note, urban areas, or industry. Families were left dependent on migrant laborers to send home their earnings from work in white areas. All of the homelands were abolished in 1994 and the land reincorporated into the Republic.

Opposition

Opposition to apartheid began immediately after the 1948 elections. Armed with the Suppression of Communism Act, which, despite its racist policies, earned South Africa support during the Cold War from the United States and Great Britain, the apartheid regime successfully crushed most resistance, however. The leading black opposition group was the African National Congress (ANC), whose members included Albert Luthuli (1898–1967; winner of the 1961 Nobel Peace Prize), Walter Sisulu (1912–2003), Oliver Tambo (1917–1993), and Nelson Mandela (b. 1918). In 1955 a Congress of the People adopted a Freedom Charter that called for a multiracial, democratic South Africa; the charter was adopted by the ANC.

By the early 1960s, as dozens of African nations gained their independence, South Africa faced increasing international condemnation. In 1961 South Africa left the British Commonwealth rather than abandon apartheid. In that same year the Dutch Reformed churches of South Africa left the World Council of Churches. South Africa also lost its vote in the United Nations and was banned from the Olympic Games as

well as many international organizations. Under the leadership of Nelson Mandela, the ANC formed a military wing in 1961, Umkonto we Sizwe (“Spear of the Nation”) that resorted to violence in its resistance to apartheid. In 1963 Mandela and seven others were arrested and sentenced to life imprisonment.

The government now banned nearly all opposition organizations and placed many individuals either in prison or under house arrest. Verwoerd was assassinated in 1966, and under his successor, John Vorster (1915–1983), some aspects of petty apartheid were relaxed. The government’s decision in 1976 to require mandatory instruction in Afrikaans in black schools, however, sparked off riots, first in the black township of Soweto and then across the country. The following year South African police murdered the Black Consciousness leader Steve Biko (1946–1977). In 1978 P. W. Botha (b. 1916) became prime minister and, while continuing to relax many apartheid policies, he took a tough stand against any opposition to the government. He also began to tinker with the apartheid system, giving coloreds and Asians limited political rights. He hoped thereby to co-opt these two groups, appease world opinion, and allow whites to remain in power.

Following Zimbabwe’s independence in 1981, South Africa and Namibia were the only remaining white-ruled countries in Africa, and tremendous pressures were building, both internally and externally, for change. South Africa faced increasingly strict international economic sanctions, which included U.S. corporations’ divestiture of their South African holdings. Internally, the need for more skilled labor led to the lifting of limits on black wages and the legalization of black labor unions with the right to strike. These and other factors required more than cosmetic changes to the apartheid system.

The End of Apartheid

In 1989 F. W. de Klerk (b. 1936) became prime minister and immediately announced the release of many black political prisoners. In February 1990 he declared in Parliament that apartheid had failed, that the bans on all political parties would be lifted, and that Nelson Mandela

We must learn to live together as brothers or perish together as fools. • MARTIN LUTHER KING JR. (1929–1968)

would be released after twenty-seven years of imprisonment. In 1991 all the remaining apartheid laws were repealed. After three years of intense negotiation, all sides agreed in 1993 to a framework for a multiracial, multiparty transitional government. Elections were held in April 1994, and Nelson Mandela became the first freely elected, majority president in South African history. In 1995 President Mandela formed a Truth and Reconciliation Commission, with Nobel Peace Prize winner Archbishop Desmond Tutu (b. 1931) as chair, to investigate human rights abuses suffered by the South African people under apartheid. The commission's stated purpose was not to punish but to help the country come to terms with its past, making it unique in human history. In 2003 President Thabo Mbeki (b. 1942) announced that the South African government would pay 660 million rand (around \$85 million at the time) to about 22,000 people who had been detained or tortured, or who were surviving family members of those murdered during the apartheid era.

Roger B. Beck

See also Race and Racism; Tutu, Desmond

Further Reading

- Beck, R. B. (2000). *The history of South Africa*. Westport, CT: Greenwood Press.
- Beinard, W. (2001). *Twentieth century South Africa*. (2nd ed.). New York: Oxford University Press.
- Benson, M. (1994). *Nelson Mandela, the man and the movement*. Harmondsworth, UK: Penguin.
- Borstelmann, T. (1993). *Apartheid's reluctant uncle: The United States and southern Africa in the early Cold War*. New York: Oxford University Press.
- Carter, G. M. (1958). *The politics of inequality: South Africa since 1948*. New York: F.A. Praeger.
- Clark, N. L., & Worger, W. H. (2004). *South Africa: The rise and fall of apartheid*. New York: Longman.
- Davenport, R., & Saunders, C. (2000). *South Africa. A modern history*. (5th ed.). New York: St. Martin's Press.
- De Klerk, F. W. (1999). *The last trek—a new beginning: The autobiography*. New York: St. Martin's Press.
- DeGruchy, J. W., & Villa-Vicencio, C. (Eds.). (1983). *Apartheid is a heresy*. Grand Rapids, MI: W. B. Eerdmans.
- Harvey, R. (2003). *The fall of apartheid: The inside story from Smuts to Mbeki*. New York: Palgrave Macmillan.
- Johns, S., & Davis, R. H. Jr. (Eds.). (1991). *Mandela, Tambo and the ANC: The struggle against apartheid*. New York: Oxford University Press.
- Kenney, H. (1980). *Architect of apartheid, H. F. Verwoerd: An appraisal*. Johannesburg, South Africa: J. Ball.
- Krog, A. (1998). *The country is my skull*. Johannesburg, South Africa: Random House.
- Lapping, B. (1989). *Apartheid: A history*. (Rev. ed.). New York: G. Braziller.
- Mandela, N. (1994). *Long walk to freedom: The autobiography of Nelson Mandela*. Boston: Little, Brown and Co.
- Mathabane, M. (1986). *Kaffir boy: The true story of a black youth's coming of age in apartheid South Africa*. New York: Macmillan.
- Meer, F. (1990). *Higher than hope: The authorized biography of Nelson Mandela*. New York: Harper.
- Mermelstein, D. (Ed.). (1987). *The anti-apartheid reader: The struggle against white racist rule in South Africa*. New York: Grove Press.
- O'Meara, D. (1997). *Forty lost years: The apartheid state and the politics of the national party, 1948–1994*. Athens, OH: Ohio University Press.
- Price, R. M. (1991). *The apartheid state in crisis: Political transformation in South Africa, 1975–1990*. New York: Oxford University Press.
- Sampson, A. (1999). *Mandela: The authorized biography*. New York: Alfred A. Knopf.
- Sparks, A. (1995). *Tomorrow is another country: The inside story of South Africa's road to change*. New York: Hill & Wang.
- South Africa Truth and Reconciliation Commission. (1998). *Truth and Reconciliation Commission of South Africa report*. (Vols. 1–5). Cape Town, South Africa: Author.
- Thompson, L. M. (2000). *A history of South Africa*. (3rd ed.). New Haven, CT: Yale University Press.

Arab Caliphates

The word *caliphate* is derived from the Arabic word *khalif* (meaning “successor” to the Prophet Muhammad). Because Muhammad (570–632 CE) had not nominated anyone to succeed him as political and military leader of the growing Muslim community that he had established in Arabia, the question of who would succeed him divided his followers. One group of followers wanted to elect a man named Abu Bakr through majority allegiance. He was also the father-in-law of Muhammad. Members of this group were called “Sunnis” because they followed the *sunnah* (the way of Muhammad). Muhammad himself used consultation and listened to majority views in temporal affairs. Another group of followers, who later became known as “Shias” or “Shiites” (partisans), wanted a man named Ali to succeed Muhammad because Ali was a blood relative and the son-in-law

Wilt thou compel men to become believers? No soul can believe but by the leave of God. • QURAN

of Muhammad. This rift was the first among Muslims and divided them into two major groups: Sunnis and Shias. The Sunni leaders were called “caliphs,” and the Shia leaders were called “imams” (religious guides).

Caliphate rule varied in the early Islamic world, which stretched from Spain to Syria. Although caliphs differed in style, they all were expected to keep Muslims united, repel threats to Islam, and continue the expansion of Islam in their respective areas. Despite their expected championship of Islam, caliphates were characterized more by political, military, and financial administration than by religious fanaticism because most Islamic lands protected their religious minorities such as Jews and Christians.

Different caliphates became known for different achievements. Some became known for expanding the realms of Islam, others for achieving great artistic heights, revolutionizing natural sciences, and creating the first institutions of higher education.

Muslim scholars, scientists, and statesmen conceived new ideas and institutions. They also, however, improved upon their conquered subjects’ artistic and scientific achievements, which were the result of thousands of years of experience in different regions that now came under Islamic rule. Synthesis and syncretism (the combination of different forms of belief or practice) also changed Muslim rulers’ outlook in political, socio-economic, and military matters.

The Pious (or Orthodox) caliphate (632–656) was the collective rule of the first four caliphs: Abu Bakr, Omar, Usman, and Ali. These “Pious” caliphs were the first companions and relatives of Muhammad. With the exception of Abu Bakr, they were assassinated, plunging Muslims into violent sectarianism and civil wars.

Abu Bakr established caliphal standards and expectations in a memorable speech that he delivered to Muslims immediately after receiving their trust and allegiance. He said, “O People! You have chosen me as your Chief, although I am not the best among you. I need all your advice and all your help. If I do well, support me; if I make a mistake, then set me right. To tell the ruler truly what you think of him is faithfulness; to conceal the truth

is treachery. As long as I obey God and His Prophet, obey me; wherein I disobey, obey me not.”

During the Pious caliphate Islam spread out of the Arabian Peninsula to Iraq, Syria, and Persia (Iran) in the east and to Palestine, Egypt, and northern Africa in the west. The fall of Sicily and Spain in western Europe and the fall of the Byzantine empire in eastern Europe were coming soon.

The Pious caliphate consolidated Islamic doctrines, compiled the Quran into one standard book (eliminating possible textual variations), created financial institutions that supported their welfare states, and set standards for future political and military rule.

The Umayyad caliphate, which was founded by the Banu Umayya family of Mecca, Saudi Arabia, ruled Syria (661–750) and Spain (756–1031). The Umayyads brought vast agricultural lands under their military control and created a fierce feudal aristocracy who trampled the rights of former landowners even though some of them had converted to Islam. To increase agricultural yield, the Umayyads extended irrigational networks, experimented with new and imported seeds, and regularized peasantry and tenancy. Expansion of the agricultural base further increased trade and business, leading to the rise of great cities such as Damascus. Muslim commercial links connected the Middle East with the Far East.

The same phenomenal rise in agricultural and commercial economy created towns in Islamic Spain such as Granada, Cordova, and Toledo, which became centers of advanced culture, higher education, and unprecedented religious tolerance among Muslims, Christians, and Jews. The Spanish caliphate ended in 1492 as the Catholic Reconquista (reconquest) ousted the last Spanish Muslims and Jews from Spain. The Syrian Umayyads lost their rule to a newly rising Muslim family, the Abbasids, their original rivals in Mecca.

The Abbasid caliphate (749/750–1258) ruled from its celebrated capital of Baghdad, Iraq. Its rule spread Islam into Persia (Iran), central Asia, Afghanistan, and northwestern India. The Abbasids were known chiefly for intellectual, artistic, and scientific achievements. They were great patrons of scholarly research, most of which

And mankind is naught but a single nation. • QURAN

was the first of its kind in world history. Caliph al-Mamun (ruled 813–833) was one of the most distinguished Abbasid caliphs. From different parts of the region al-Mamun brought together scientists when he built Bait al-Hikma (House of Wisdom) in Baghdad. There Muhammad bin Musa Al-Khwarizmi (780–850) produced the new sciences of algebra and algorithm. In the scientific and liberal culture of Baghdad, new areas were covered in astronomy, geography, philosophy, mathematics, natural sciences, anatomy, and medicine.

Under the Abbasids Muslim scholars and scientists translated into Arabic ancient Greek masterpieces of philosophy, arts, and sciences. These Arabic translations were further translated into the vernaculars of Europe, where this body of knowledge led to the rise of the Renaissance and rationalist thinking. Some Arab scholars dedicated their works to the Abbasid caliph al-Mamun, who had provided them with the best of libraries in world history.

Abdul-Karim Khan

See also Islamic World; Muhammad

Further Reading

Arnold, T. W. (1965). *The caliphate*. London: Routledge & Kegan Paul.
Esposito, J. L. (1999). *The Oxford history of Islam*. New York: Oxford University Press.

Arab League

The Arab League is an organization of twenty-two countries whose purpose is to develop educational and economic policies and programs to benefit the Arab world. Although the Arab League was organized in 1945, its roots go back several decades earlier.

During the early 1900s most Arab countries were still under colonialism, but a growing number of Arab political leaders, especially those from Syria and Egypt, wanted more of a role in shaping the future of their

countries. By 1932 leaders had made plans for the Pan-Arabian Conference, the purpose of which (according to a 1932 *New York Times* article) was to “combat imperialism and to free Arabian States from mandatory control.” Calls for Arab unity increased, led by Egyptian diplomat Abdul Rahman Azzam and Iraqi Prime Minister Nuri Sa’id, who is credited by some historians with coining the name “Arab League.” By 1944, at a conference in Alexandria, Egypt, the framework for the league was created, and on 22 March 1945, the official charter was signed. The Arab League’s constitution declared that one of the Arab League’s goals is “to promote cooperation among member states, particularly in matters of culture, trade, and communication” (*New York Times* 1945, 8). Seven countries were the founding members: Egypt, Jordan (then called “Trans-Jordan”), Saudi Arabia, Syria, Iraq, Lebanon, and Yemen. The league’s first secretary-general was Abdul Rahman Azzam, whose previous experience included serving as Egypt’s minister of Arab affairs and undersecretary of foreign affairs. A strong proponent of Arab nationalism, Azzam would become the Arab League’s liaison with Western governments as well as the league’s spokesperson at the United Nations.

During its first year the league advocated for greater autonomy for those Arab countries still under colonial rule or occupied by foreign troops. The league expressed support for Libya (which had been under Italian rule until World War II), and it also spoke out on behalf of Syria, which, although an independent republic since 1941, still had French troops on its soil. The Arab League also wanted a solution to the problem of Palestine; members were opposed to further Jewish immigration into the region. They joined to mount an attack against the newly created state of Israel in 1948, but the attack was unsuccessful.

During the league’s early years it did not have much actual power, but it was able to speak with a unified voice on issues that mattered to the Arab world. Secretary-General Azzam became well known for his diplomatic efforts at the United Nations; he served as secretary-general until he resigned in 1952. After Libya finally



gained independence, it joined the Arab League in 1953. Next to join were Sudan in 1956, Tunisia and Morocco in 1958, and Kuwait in 1961. Other members include Algeria, Bahrain, Comoros, Djibouti, Mauritania, Oman, Qatar, Somalia, and the United Arab Emirates.

Lack of Unity

Although the idea of the Arab League showed promise, the organization's effectiveness has been hampered by members who at times refuse to work together. Political divisions have often made consensus impossible. Since its inception the Arab League has acquired a reputation for inaction in the face of crisis. The Egyptian weekly newspaper *Al-Ahram* observed in a 2002 retrospective that the Arab League had not been notable for success in handling inter-Arab disputes.

When problems arose in the Arab world, the league tended to react with anger or blame. For example, when Egypt's president, Anwar Sadat, decided to make a peace treaty with Israel during the late 1970s, the league members united and expelled Egypt from membership, moving meetings that had been held in Cairo to Tunis, Tunisia. A decade would pass before Egypt was reinstated. In addition to ongoing antipathy toward Israel (and the perception that U.S. foreign policy unjustly favors Israel), other issues led to feuds between member countries. During the late 1980s the league was unable to resolve a dispute over oil between Iraq and Kuwait. This dispute led Iraq's Saddam Hussein to order the invasion of Kuwait. The United States intervened, driving Iraq out of Kuwait during the first Gulf War.

U.N. Report

Although the Arab League has at times been an important voice for improvements in the Arab world, a United Nations report issued in 2002 showed how much needs to be done. Prepared by fifty Arab scholars, the report examined political, economic, and cultural problems in Arab countries and concluded that these countries were lagging behind other parts of the world. "Arab countries are the least free in terms of political participation, civil liberties and independent media," the report stated and

also took Arab countries to task for their treatment of women. "More than half of Arab women are illiterate, and many suffer from legal and social discrimination. They also have the lowest levels of political participation; women have 3.5 percent of seats in Arab legislative bodies, compared with 11 percent in sub-Saharan Africa . . . [And] despite substantial investment in education, Arab schools are producing graduates ill-suited to the global economy. Only 0.6 percent of Arabs use the Internet, compared with 54 percent of Americans" (*USA Today* 2002, 6A).

Meanwhile the rise of Islamic fundamentalism and the violent actions of the terrorist network al-Qaeda have created splits between moderate Muslims and those from more conservative countries. Whereas the league has issued policy papers that condemn terrorism, some member countries have actively supported terrorism. Even when a Muslim despot mistreats his people, the Arab League still seems reticent to criticize a member country. Since 2002 members of the league have made a renewed effort to unite and develop new strategies, brought about by world events such as the U.S. invasion of Iraq, but the May 2004 summit, held in Tunis, showed that the league still has a long way to go: One leader walked out, and eight others didn't attend at all. Although a series of position papers emerged from the summit, including one that pledges to implement economic and social reforms and work toward peace in the Middle East, we must wait to see what role, if any, the Arab League can play in solving the region's problems.

Donna L. Halper

See also Islamic World

Further Reading

- Al-Arian, L. (2004, July-August). Prospects for democracy in the Middle East. *Washington Report on Middle East Affairs*, 23(6), 88–90.
- A new Arab order? Or just the settling of scores? (1991, September 28). *The Economist*, 320(7726), 4–8.
- Brewer, S. P. (1945, March 23). Charter adopted by Arab League. *New York Times*, p. 8.
- Coury, R. M. (1982). Who invented Arab nationalism? *International Journal of Middle East Studies*, 14(3), 249–281.

Imaginable? *Despite its summit fiasco, the Arab world is groping for democracy.* (2004, April 3). *The Economist*, 371(8369), 13.
 UN: Lack of freedom stunts Arab nations. (2002, July 2). *USA Today*, p. 6A.

Archaeology

Archaeology is a part of the anthropological four-field approach to studying past and present cultures. The biological, linguistic, sociocultural, and archaeological divisions of anthropology work together to research societies through areas such as diet, language, social structures, and kinships. Archaeology in particular attempts to understand, describe, and explain the construction and development of past cultures through the study of their material remains. In order to do this, archaeologists often incorporate interdisciplinary methodologies from other fields, as well as develop techniques to explore the numerous questions archaeological data may present.

It appears that people have always had an interest in groups that lived before them. Typically, most want to understand how previous cultures interpreted the world around them. For instance, during Egypt's eighteenth dynasty (1532–1305 BCE), a number of scribes wanted to know more about how those that lived before them constructed tombs, how people were interred, and how they interpreted the afterlife. To answer these questions they examined burials dating from centuries earlier and left graffiti to record their visits. During the sixth century BCE Nabonidus, a prominent king of the famous Babylonian empire, demonstrated his interest in the past by excavating at the city of Ur. He desired to know more about ancient Sumerian culture, a civilization then already 2,500 years old. Interestingly, the Babylonian king shared many of his finds with others by exhibiting them. His daughter, Bel-Shalti Nannar, continued her father's archaeological work following his death.

Archaeology has continued to play a part in how people investigate past cultures, but the discipline has undergone considerable developments. During the fifteenth

century CE, for example, Cyriacus of Ancona, an Italian merchant, traveled the Mediterranean coast and Greece, drawing and gathering information about ancient monuments, copying inscriptions, and collecting objects from early civilizations. Because Cyriacus attempted to study ancient writings and material culture, some consider him to be one of the first archaeologists. Moreover, scholars began to challenge religious traditions through archaeology. For instance, in 1655, Isaac de la Peyrere argued that stone tools found in Europe came from a culture that existed before the biblical Adam. The development of Assyriology and Egyptology during the nineteenth century CE also contributed to how scholars studied the civilizations of Assyria, Egypt, and others. Jean Francois Champollion's deciphering of the Rosetta stone in 1822 was a huge breakthrough in understanding ancient Egyptian languages and dialects.

Also during the nineteenth century, scholars and laypersons from Europe and other countries around the world sought to explore past civilizations through the study of material culture. Although most had sincere motives, some of the approaches to excavating were essentially treasure hunting. However, the growing study of evolution during this period influenced archaeology profoundly. Many scholars now began to investigate the

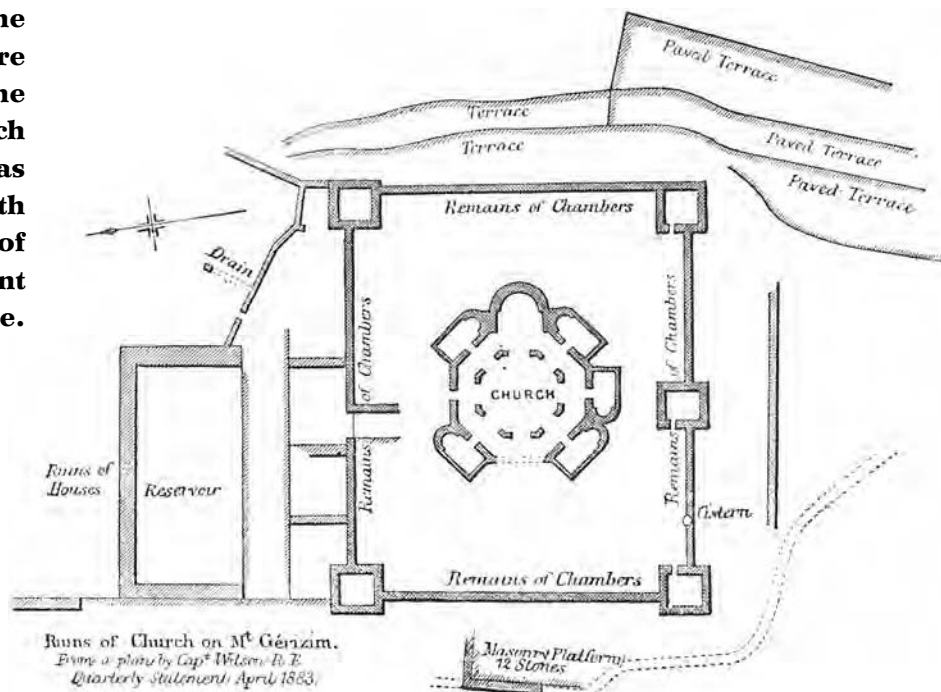


The Temple of Warriors at the major archaeological site of Chichen Itza in Mexico.

Detailed drawings of the site being excavated are an important part of the archaeological research process. This drawing was made in the nineteenth century of the ruins of a church on Mount Gerizim in Palestine.

origin and development of peoples and their cultures; digging at sites became more systematic. In the latter nineteenth century and into the twentieth, archaeologists began to focus on chronology, established the successive “three-age scheme” of stone, bronze, and iron, and searched more intensely for the beginnings of humankind. Anthropologists Charles Darwin (1809–1882), Lewis Henry Morgan, Edward B. Tylor, and others contributed greatly to this new direction. Although chronologies, the three-age scheme, and the quest for human origins would undergo numerous debates and controversies, the discipline of archaeology benefited and adopted more scientific approaches. Some significant contributions to the discipline must be credited to scholars such as Heinrich Schliemann (Troy), Flinders Petrie (the Near East), Leonard Woolley (Carchemish), Aurel Stein (Asia), Mortimer Wheeler (Britain), the Leakeys (Africa), and W. F. Albright (Israel/Palestine).

The 1960s and 1970s “New Archaeology,” sometimes referred to as analytical or processual archaeology, brought a revolution to the field that is reflected in some fashion in the work of many archaeologists to this day. Lewis Binford, Fred Plog, William Longacre, and others took a more anthropological approach and sought to explore past civilizations holistically through ecology, environment, and culture. This “new” approach and philosophy has placed a permanent stamp on field and laboratory methodologies. Consequently, archaeological teams have grown to incorporate a blend of staff personnel that may include paleoethnozoologists, geologists, climatologists, and anatomists. Processual archaeology has also generated post-processual archae-



ology. This approach is similar to the New Archaeology, but also focuses on the inclusion of history and tries to interpret meaning in artifacts. Ian Hodder, Mark Leone, and others have contributed to the development of this methodology.

Theodore W. Burgh

See also Dating Methods; Decipherment of Ancient Scripts; Paleoanthropology

Further Reading

- Bahn, P. (Ed.). (1996). *The Cambridge illustrated history of archaeology*. New York: Cambridge University Press.
- Edwards, I. (1985). *The pyramids of Egypt*. New York: Viking Press.
- Trigger, B. (1993). *The history of archaeological thought*. New York: Cambridge University Press.
- Woolley, C. (1982). *Ur of the Chaldees*. Ithaca, NY: Cornell University Press.

Architecture

Architecture is the art and science of building environments for human needs. Since prehistoric times, people have created architecture to shelter their activities and to express their society’s values or their personal values. Usually, the term *architecture* refers to a building or

group of buildings. However, the field overlaps with interior design and with landscape and urban design. Architects respond to the socioeconomic and cultural contexts in which they are practicing. Many architects agree with the ancient Roman Vitruvius (c. 90 BCE–c. 20 BCE), who wrote that architecture must be stable, useful, and beautiful. To accomplish this architects must understand (a) how to employ one or more structural systems to support the design, (b) how the design will be used once it is built, and (c) what a client or society will find visually pleasing. Therefore, architects are faced with choices regarding approaches to the building site, available materials, and building technologies.

Prehistoric and Nonurban Architecture

Paleolithic era (c. 35,000 BCE–8000 BCE) habitations were caves and rock shelters. Early nomadic humans also created portable woven architecture—oval huts of vertical poles that were covered with hides or thatched reeds. In the Neolithic era (c. 8000 BCE–1500 BCE), herders and farmers erected permanent settlements, including monumental buildings that merged with surrounding landscapes. They crudely quarried large stones (megaliths), moved them by barge and by sled on rollers, and raised them on earthen ramps to create trabeated (or post-and-lintel) structures of vertical columns supporting horizontal beams. The most famous example of such a structure is Stonehenge (c. 2750 BCE–1500 BCE) on Salisbury Plain, England, a series of concentric circles probably built to accommodate festivals held by related warrior tribes. The more common dolmen was a sepulchral chamber that was built of trabeated megaliths and buried within an artificial hill, called a cairn.

Little remains of more humble buildings, except their influence on the surviving vernacular architecture of villages around the world, rooted in the myths and traditions of the people. In African Cameroon each Bamileke village has a central open space, chosen as sacred by the ancestors. The adjacent chief's house, an aggrandized version of the others in the village, has bamboo walls fronted by a porch and sheltered by a thatched conical



The remains of peat and a stone wall of a Neolithic settlement in Ireland.

roof. In Cameroon's Fali culture, residential compounds are inspired by the forms, orientation, and dimensions of the ideal human body. The Dogon culture of Mali builds men's assembly houses, open-sided huts in which anthropomorphic wooden pillars, representing the ancestors, support a thick roof of dried vegetation that shades the interior but allows air to circulate.

A similar situation is found in North America, where the Anasazi people built "Great Houses," such as Pueblo Bonito, New Mexico (tenth–eleventh centuries CE), in which sandstone walls defined adjacent living units accessed from openings in the wooden roofs. Hundreds of units encircled central plazas that served as the roof of subterranean kivas. Entered through their ceilings of corbelled logs (each layer projecting farther inward than the layer below), kivas were sacred gathering spaces. When threatened by enemies, the Anasazi abandoned the Great Houses for dwellings built into the sides of easily defensible, south-facing cliffs, such as those at Mesa Verde, Colorado (twelfth–thirteenth centuries CE).

Ancient Temple Ziggurats, Tombs, and Palaces

Urban civilization—dependent on the development of writing, trade, diversified employment, and a centralized government—produced a variety of monumental building types, generally to glorify its gods and god-kings. In the first cities of Mesopotamia, temples were raised heavenward on giant stepped platforms called ziggurats. Both temple and ziggurat were built of sun-dried mud brick



A pyramid at Chichén Itzá in Mexico, an example of ancient Mesoamerican monumental architecture.

using bearing-wall construction. The Ziggurat of Ur-Nammu (c. 2100 BCE) in Ur, Iraq, was faced in a more durable kiln-dried brick laid in a bitumen mortar. In Central America the stepped pyramids of the grand city of Teotihuacán (c. 250 BCE–650 CE), near present-day Mexico City, were faced with volcanic stone and stucco and probably painted bright colors. They formed the backdrop for the rituals and public events associated with the temples that took place on the top platforms.

Of the monumental tombs, the most famous are the three Great Pyramids of Giza (c. 2551 BCE–2490 BCE) in Egypt, which exhibited ashlar masonry (carefully cut stone blocks), piled in tight rows and faced in polished limestone. Workers probably used wooden rollers and sleds on earthen ramps to elevate the heavy stone blocks, and levers to place them in their final locations. These tombs memorialized god-kings for eternity and were seen as ladders for royal spirits to reach the heavens. In Greece beehive-shaped tombs survive, such as the Treasury of Atreus (or Tomb of Agamemnon, c. 1300 BCE–1250 BCE) at Mycenae, where the subterranean main circular chamber was capped by a vault of corbelled stone.

A third type of monument served rulers during their lives. The enormous Assyrian Palace of King Sargon II (c. 720 BCE–705 BCE) at Dur Sharrukin, modern Khorsabad, Iraq, represented his combined secular and sacred authority and intimidated his foes with the carved imaginary beasts and scenes of military prowess that decorated its mud-brick walls.

The Greek Temple

The ancient Greeks influenced later Western builders with their post-and-lintel building tradition. Their three types of orders—systems of columns supporting entablatures—were distinguished by proportion and decoration. Stone blocks of limestone and marble were held in place by metal clamps and dowels, and the sloping wooden roof rafters were covered by terra-cotta tiles. The apex of Greek architecture, the Parthenon temple (448 BCE–32 BCE), by Iktinos and Kallikrates, was the focal point of Athens's raised sacred precinct, called the acropolis. Designed to be appreciated as a three-dimensional volume, the Parthenon featured a stepped platform and an exterior row of columns (or colonnade) that sheltered a central room housing a gigantic statue of Athena. The temple's proportions, determined by harmonious numerical ratios, were given life by the slight curvature of lines (called entasis), so components appeared to resist the weight imposed on them from above. Surfaces were stuccoed, painted, and embellished with colorful sculpture admired for its naturalism and gracefulness.

Roman Innovations and Their Progeny

Ancient Roman buildings, complexes, and new towns were regimented by simple geometric spaces related along clear axes and were often constructed using new materials and technologies. Voluminous interiors were created by using the semicircular arch, a method of spanning space with many small wedge-shaped elements that balanced against one another. Three-dimensional extrusions of the arch formed tunnels, rings, domes, and other types of spaces. The Romans employed concrete—a mixture of cement, water, and aggregate that can take on many flowing shapes—and faced it in stone or coursed brick and tile. The best-known examples of Roman architecture, the Pantheon temple (118 CE–25 CE) and the Colosseum amphitheater (c. 70 CE–80 CE), both in Rome, had interiors that were spatially exciting, their concrete surfaces lavishly finished with multicolored marbles, gilding, and sculpted detailing.

During the waning years of the Roman empire in



Western Europe, Christians adopted the multipurpose basilica as the model for their churches, such as Old Saint Peter's (begun c. 320 CE) in Rome. This multiaised building featured parallel stone colonnades that supported the masonry walls above. Those in turn held up a roof structure of wooden trusses, rigid triangular frames that resulted in the typical gabled roof form. The glittering glass mosaic surfaces of the interior were hidden by a bare brick exterior. Byzantine Christians in the eastern half of the empire chose Roman vaulted structures as their models, resulting in the Cathedral of Constantinople, Hagia Sophia (532 CE–537 CE), by Anthemios of Tralles and Isidorus of Miletus. The enormous masonry dome, though it rested on four curved triangular surfaces, called pendentives, seemed to float unsupported above the interior, thanks to the ring of windows at the base of the dome and the light-reflecting surfaces of mosaic and marble throughout the vast interior. Also inspired by Rome, Islamic builders developed a new building type for communal worship, the mosque. The Great Mosque (eighth–tenth centuries CE) in Córdoba, Spain, exhibited the horseshoe-shaped arches of alternating stone and brick bands that became typically Islamic, while innovatively stacking the arches in two levels, thereby creating a limitless sense of space. Dazzling marble and mosaic decoration was limited to stylized vegetation and other non-representational patterns, according to Muslim practice.

Beyond Rome's orbit, in the Buddhist monastery at Sanchi in India, the dome of the Great Stupa (first century BCE–first century CE) enshrined important relics. Protected within a wall featuring four elaborate gateways, the earth-and-rubble-filled dome represented the moun-

The Forum Arch in Rome.

tain of the world. Pilgrim worshippers circumambulated the building on walkways at two levels, reflecting the Buddhist belief in cyclical earthly suffering that was only relieved upon reaching nirvana.

The Middle Ages

In the centuries after the Roman empire, European Christians supported powerful monasteries, whose builders turned to bearing-wall construction in limestone, granite, and sandstone. Master builders maintained the basilican church form, but ultimately they replaced the simple plan and trussed roof with more complex solutions to the problems presented by increasing numbers of pilgrims and concerns over fire safety. During the Romanesque Era (c. 1050–1200), so called due to the revival of Roman (that is, semicircular) vaulting techniques, builders experimented with heavy stone-vaulted ceilings and extended side aisles around the church's perimeter to improve circulation for pilgrims. Extensive sculpted ornament in abstracted forms greeted visitors with Christian lessons of good versus evil. The French church of Saint-Sernin (c. 1070–1120) in Toulouse exemplified this movement.

Structural experiments coalesced in the later twelfth century and throughout the thirteenth, during the Gothic era, led by northern France, which dominated Europe at that time. Gothic verticality, aspiring to express divine loftiness, combined with great visual coherence at Chartres Cathedral (1194–1220), where the minimal stone skeleton supported walls of stained glass illustrating sacred and secular themes. This effect was made possible through the combined use of the structurally efficient pointed arch, the framework of arched ribs (rib vaults) that allowed lighter vault panels, and the flying buttress that supported the vaults outside the building. The church vaults were protected by broad and steep roofs of innovative wood truss design. A very high level of roofing technology was also evident in the contemporary wooden stave churches of Norway.

Around the same time, builders in South and East Asia likewise developed impressively tall structures to house images of their gods and to visually connect earth with heaven. Hindu Indians created the Visvanatha Temple to



This photo shows a portion of an adobe house block at Acoma Pueblo in New Mexico. The architecture combines indigenous design with techniques brought by the Spanish—mud bricks smoothed with a mud plaster.

Siva (c. 1000) at Khajuraho, in the state of Madhya Pradesh, which was derived from a mandala, the mystical gridded plan of a sacred space. Featuring a sequence of increasingly important spaces, the interior concluded at the inner sanctum with its image of Siva. Small interior spaces reflected the limitations of massive masonry walls as well as the minimal spatial needs of small groups of worshippers. Seemingly countless voluptuous sculptures covered the exterior surfaces that climaxed at the mountain-like tower over the inner sanctum. In China and Japan, Buddhist pagodas served similar uses but were characterized by their winged eaves and centralized plans.

In Europe continued insecurity encouraged the powerful to live in fortified castles. A moat and high walls with towers protected inner courts and the main multi-storied residence, called a keep or donjon. By the latter Middle Ages, improved security fostered the development of the less-fortified, but still grand, manor house. Its main room, or great hall, a multifunctional entertainment space, required sturdy roof support in the form of various trussed solutions. The Islamic rulers of Spain produced luxurious, sprawling palace complexes, such as the Alhambra (thirteenth–fourteenth centuries) in Granada. The gardens interspersed throughout the complex pro-

vided refreshing water, fragrant plants, and soft, indirect lighting. Rooms had ethereal domes, whose structure was veiled by muqarnas, stucco- or woodwork forming open, honeycomb-like cells.

Idealized Plans and the Renaissance

Beginning in the fifteenth-century Italian Renaissance, men with humanistic educations, not just practical building experience, aided by familiarity with classical antiquity, mathematics, and orthogonal drawing, won many architectural commissions. Their buildings and publications argued for the unity of architectural practice and theory. Filippo Brunelleschi's Cupola (1417–1434), or dome and lantern, for the Cathedral of Florence combined a Gothic pointed profile and a Pantheon-like concentric grid with his original ideas of a double shell, interlocking brick pattern, and inventive construction mechanisms. Sophisticated uses of Roman ideas also characterized the work of Leon Battista Alberti, whose classically grand church of Sant'Andrea (begun c. 1470) in Mantua, Italy, derived from ancient building types, proportional systems, and the classical orders.

Efforts to supersede classical accomplishments were

Houses are built to live in, not to look on; therefore, let use be preferred before uniformity, except where both may be had. • FRANCIS BACON (1561–1626)

evident in the contemporary architecture of Rome. The first grand scheme by Donato Bramante (1505) for rebuilding the Basilica of St. Peter affirmed the humanist interest in the idealized centralized church plan. Under Michelangelo's guidance the design of the basilica's cupola (1546–1564) was largely resolved, producing a cohesive and influential scheme that was the last of the great purely masonry domes. Michelangelo also designed a monumental civic center, the Campidoglio (begun 1538), its complexity organized by a strong central axis, colossal pilasters on the building facades, and the view over the city.

Renaissance ideas spread from Florence and Rome. Near Venice, Andrea Palladio combined his experience as a stonemason and his humanist education to become an important architect and to inspire his influential architectural treatise. In his design for a suburban residence, the Villa Rotonda (begun 1566), near Vicenza, Italy, he appropriated the portico (four, actually) and central domed hall formerly associated with religious buildings. The building is famous for its idealized siting, harmonic proportions, simple geometries, and clear axial relationships. Venice's powerful nemesis, the Ottoman empire, produced Palladio's counterpart, the architect Sinan, whose skillful designs for central-domed mosques with stunning tile work was represented by his Mosque of Selim II (1568–1575) in Edirne, Turkey.

Idealized masonry monuments of the West contrasted with the idealized wooden trabeated structures of the East, climaxing in Ming Dynasty China. The focal point of Beijing's monumental Forbidden City was the emperor's principal throne room, the Hall of Supreme Harmony (begun 1627). Though grander in size and ornament than other Chinese halls, its arrangement of standardized interchangeable parts was similar. A grid of wooden columns supported fingerlike brackets, which in turn held boxlike truss beams (or stepped roof trusses) that produced the characteristic curve of the tiled roof. Japanese builders transformed the Chinese architectural system by favoring more subtle asymmetrical arrangements and indirect paths of circulation, from Sen no

Rikyu's intentionally rustic Taian teahouse (c. 1582) to the impressive Imperial Katsura Palace (largely c. 1615–1663), both in Kyoto.

Baroque Vitality

In the seventeenth-century West, Renaissance priorities blended with the dynamic growth of science, nationalism, and religious fervor. Designs, often structurally and spatially complex and characterized by illusionistic effects, were best appreciated by a person moving through them, for example, Gianlorenzo Bernini's Piazza (1656–1667) at St. Peter's in Rome. Intense ornamentation was common during the period and spread to Spanish and Portuguese colonies in Latin America. The monumental enlargement of the Château at Versailles (1667–1710), for France's autocratic "Sun-King" Louis XIV, had an axial network that climaxed at the king's central bedchamber. In the château's Hall of Mirrors, innovative large mirrors created infinitely reflecting vistas of the vast gardens. Scientist Christopher Wren reworked continental influences in his redesign for St. Paul's Cathedral (1675–1711) in London, where the cupola combined an inner masonry shell with a lightweight outer dome and lantern. In Bavaria structural experimentation, illusionism, and spatial complexity climaxed in works such as the Residence of the Prince-Bishops (1719–1753) in Würzburg, by Johann Balthasar Neumann.

Historical Revivals

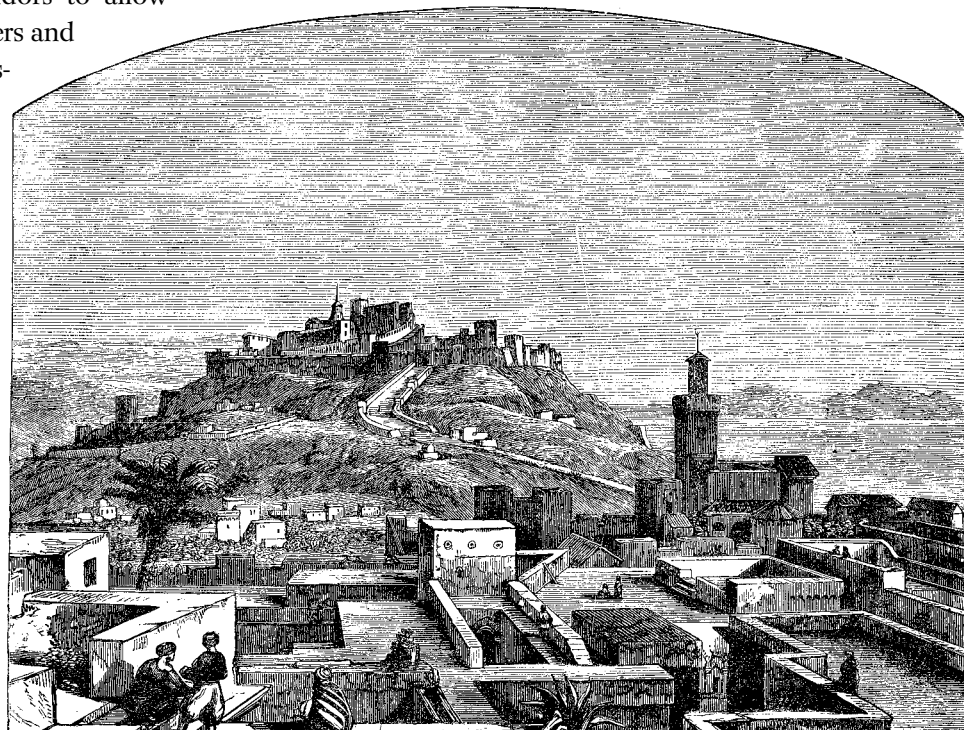
Eighteenth-century architectural influences included the Enlightenment, which emphasized the individual person; increased historical scholarship, especially archaeology; and the Industrial Revolution. Giambattista Piranesi's widely disseminated, imaginative views and reconstructions of ancient Roman ruins aroused awe. In England, Robert Adam's renovation of Syon House (1760–1769) in Middlesex sought to authentically re-create the architecture of classical Rome. Yet with Horace Walpole, Adam also created the mysterious, picturesquely asymmetrical Gothic Revival Strawberry Hill (1749–1763) at Twickenham, its different parts appearing to be centuries-old



accretions. French architect Jacques-Germain Soufflot combined Gothic structural lightness with classical spatial purity in his Church of Ste.-Geneviève (1755–1780) in Paris. Étienne-Louis Boullée drew unbuildable projects, like the Cenotaph to Isaac Newton (1783–1784), a classical but sublime giant hollow sphere that celebrated the achievements of the great physicist. It connected use and form in a direct manner called “architecture parlante.” Mining historical styles for contemporary projects continued into the nineteenth century, highlighted by Karl Friedrich Schinkel’s Greek Revival Altes Museum (1824–1830) in Berlin, and the Gothic Revival Houses of Parliament (began 1835) in London, by Charles Barry and A. W. N. Pugin.

By the mid-eighteenth century, Europeans began to seek increasingly private and comfortable residences. Renovated (1732–1739) in the delicate Rococo style by Germain Boffrand, the Hôtel de Soubise in Paris incorporated intimate interiors that were easily heated by improved fireplace design and easily illuminated by large windows and mirrors. Residences of the well-to-do incorporated dumbwaiters and corridors to allow greater separation between masters and their servants. The English aristocracy and North American colonists also turned to making more comfortable buildings, typically favoring a restrained neo-Palladian approach to design, such as Thomas Jefferson’s Monticello (1768–1782) in Charlottesville, Virginia.

Houses in Tangier, Morocco, in the nineteenth century. The flat roofs provide a sitting area in cool evenings.



Early Modernism

In the nineteenth century, the Industrial Revolution expanded its impact on European architecture. France’s official architectural school, the École des Beaux-Arts, emphasized “universal” architectural ideals found in primarily classical models, but the buildings of its alumni, including Charles Garnier’s exuberant Opéra (1860–1875) and Henri Labrouste’s Bibliothèque Ste.-Geneviève (1838–1850), both in Paris, united those lessons with contemporary technology. The celebration of modern materials and their logical assembly was epitomized by the Eiffel Tower (1887–1889), by Gustave Eiffel. Conversely, William Morris, the most significant British voice at the time, protested against the social upheaval and shoddy craftsmanship associated with the Industrial Revolution. His Arts and Crafts Movement was advertised by his own home, The Red House (1859–1860), by Philip Webb, in Bexley Heath, with its informal, vernacularly derived forms and materials that hearkened back to a simpler time.

American architects adapted these British ideas to

Architecture is the art of how to waste space. • PHILIP JOHNSON (B. 1906)

their own context. Balloon-frame construction (precut timber studs connected by machine-made nails), which was sheathed with wooden shingles, allowed more informal, open interior layouts that were easy to heat with American central heating systems and easy to cool during the hot American summers. The epitome of the American Shingle Style was the Mrs. M. F. Stoughton House (1882–1883) in Cambridge, Massachusetts, by Henry H. Richardson. Americans continued to take the lead in residential design with the work of Frank Lloyd Wright, whose inspiration came from nature, simple geometries, and exotic cultures. Wright's F. C. Robie House (1908–1910) in Chicago climaxed his search for the "Prairie House." The building's strong horizontality and locally inspired ornament harmonized with the Midwestern prairie. Abstracting Japanese and other prototypes, he created transitional zones that wove together exterior and interior space and effortlessly connected interior spaces around the central hearth.

Modernism

Seeking to express contemporary life and technology, modern architects increasingly relied on modern materials, exposed structure, and undecorated compositions that were open and asymmetrical. Many designers searched for schemes that would be universally valid in a world made more homogeneous by technology. The results spanned from a machine-like precision to an organic expression of use and/or place.

Iron and steel structural frames increasingly transformed architecture beginning in the late nineteenth century. European Art Nouveau designers copied natural forms and exposed the sinuous iron structure in their glass-filled buildings, such as Victor Horta's Tassel House (1892–1893) in Brussels, Belgium. In American cities the demand for space, the need to cluster offices, the development of business tools, and the desire to create bold symbols of business set the stage for modern skyscraper construction. Tall buildings depended on the passenger elevator and the development of metallic cage construction that was fireproofed, insulated, and orna-

mented in brick, stone, or terra-cotta. Louis Sullivan's Guaranty Building (1894–1895) in Buffalo, New York, exemplified early attempts to devise a visually coherent solution to a new building type. Ludwig Mies van der Rohe, the master of the steel and glass skyscraper, pared away visual clutter to express the purity and careful proportions of the steel skeletons, as exhibited in his Seagram Building (1954–1958) in New York City. Other building types were similarly transformed by metal construction, for example Kenzo Tange's steel tensile suspension design for the National Gymnasium (1961–1964) in Tokyo, Japan.

The rediscovery of concrete as a primary building material and the innovative addition of metal bars to create reinforced concrete structures expanded the scope of modern architecture. Le Corbusier (born Charles-Edouard Jeanneret) established his international reputation with machine-age designs like the pristine concrete box of the Villa Savoye (1928–1929), near Paris; and later he led the expressionistic Brutalist movement with the aggressive, roughly finished concrete forms of the Capitol Complex (1950–1965) in Chandigarh, India. The contours and textures of subsequent reinforced concrete buildings ranged from the soaring openness of Jørn Utzon's Opera House (1956–1973) in Sydney, Australia, to the contemplative enclosure of Tadao Ando's Koshino House (1979–1981) in Hyogo, Japan.

Over time architects increased their use of glass from the exterior "curtain" (non-load-bearing) walls of Walter Gropius's Bauhaus Building (1925–1926) in Dessau, Germany, to the strut- and mullion-free glazed exterior of Norman Foster's Willis Faber Dumas Office Building (1975) in Ipswich, United Kingdom.

Some highly successful twentieth-century architects gained respect by adapting modern, universal themes to local conditions and cultures in their work. Among the most noteworthy were Alvar Aalto's Civic Center (1949–1952) in Säynätsalo, Finland; Louis Kahn's National Assembly Building (1962–1974) in Dacca, Bangladesh; and Renzo Piano's Jean-Marie Tjibaou Cultural Center (1991–1998) in Nouméa, New Caledonia.

Architecture Enters the Twenty-first Century

Contemporary architectural trends continue to respond to the issues of culture and technology. Like many leading architects, Rem Koolhaas has questioned societal beliefs and institutions in his Netherlands Dance Theater (1987), The Hague. Innovative solutions for structure and interior illumination aided the design of Norman Foster Associates giant Hong Kong Bank (1986) in Hong Kong, China. Tensile membrane structure, such as the Denver (Colorado) International Airport (1994) by C. W. Fentress, J. H. Bradburn & Associates, allows large spaces to be enclosed. Digitized imaging software facilitated the titanium-clad design of Frank Gehry's Guggenheim Museum (1997) in Bilbao, Spain.

In the growing trend of "green" or ecologically sustainable design, designers conserve materials and energy, provide occupants with abundant fresh air and natural light, and carefully manage waste. Among the best-known examples is William McDonough & Associates Offices for Gap, Inc. (1997) in San Bruno, California, with its careful siting, vegetated roof, and other "green" elements. Kenneth Yeang's Menara Mesiniaga Building (1991) in Kuala Lumpur, Malaysia, connects sustainable design with the local traditions of Southeast Asia.

A third trend is the revival in vernacular traditions that has been building since at least Hassan Fathy's design for the Village of New Gourna (1945–1948) at Luxor, Egypt. In the United States vernacularism has inspired the pedestrian-friendly "new urbanism" movement publicized by the design of Seaside, Florida (begun 1981), by Andres Duany and Elizabeth Plater-Zyberk.

David M. Breiner

Further Reading

- Benevolo, L. (1978). *The architecture of the Renaissance* (2 vols.). (J. Landry, Trans). Boulder, CO: Westview.
- Blunt, A. (Ed.). (1988). *Baroque and Rococo architecture and decoration*. Hertfordshire, UK: Wordsworth Editions.
- Conant, K. J. (1987). *Carolingian and Romanesque architecture: 800–1200*. Baltimore, MD: Penguin.
- Curtis, J. W. R. (1996). *Modern architecture since 1900* (3rd ed.). Oxford, UK: Phaidon.

- Doordan, D. P. (2001). *Twentieth-century architecture*. Upper Saddle River, NJ: Prentice Hall/Harry N. Abrams.
- Fletcher, B. (1996). *A history of architecture* (Rev. ed.). Oxford, UK, and Boston: Architectural Press.
- Grodecki, L. (1977). *Gothic architecture*. (I. M. Paris, Trans.). New York: Harry N. Abrams.
- Kostof, S. (1995). *A history of architecture* (2nd ed.). New York: Oxford University Press.
- Krautheimer, R. (1986). *Early Christian and Byzantine architecture*. Harmondsworth, UK, and Baltimore, MD: Penguin.
- Kruft, H.-W. (1994). *A history of architectural theory from Vitruvius to the present* (R. Taylor, Trans.). London: Zwemmer; New York: Princeton Architectural Press.
- Lloyd, S., Müller, H. W., & Martin, R. (1974). *Ancient architecture: Mesopotamia, Egypt, Crete, Greece*. New York: Harry N. Abrams.
- MacDonald, W. (1982/1986). *The architecture of the Roman Empire* (Rev. ed., 2 vols.). New Haven, CT: Yale University Press.
- Mainstone, R. (1998). *Developments in structural form*. Oxford, UK, and Boston: Architectural Press.
- Mark, R. (Ed.). (1993). *Architectural technology up to the Scientific Revolution: The art and structure of large-scale buildings*. Cambridge, MA: MIT Press.
- Middleton, R., & Watkin, D. (1987). *Neoclassical and 19th century architecture*. (Rev. ed.). New York: Harry N. Abrams.
- Moffett, M., Fazio, M., & Wodehouse, L. *Buildings across time: An introduction to world architecture*. London: McGraw-Hill.
- Oliver, P. (Ed.). (1997). *Encyclopedia of vernacular architecture of the world* (3 vols.). New York: Cambridge University Press.
- Placzek, A. K., (Ed.). (1982). *Macmillan encyclopedia of architects* (4 vols.). New York: Macmillan.
- Raeburn, M. (Ed.). (1988). *Architecture of the Western World*. Leicester, UK: Popular Press.
- Salvadori, M., & Heller, R. (1986). *Structure in architecture*. Englewood Cliffs, NJ: Prentice-Hall.
- Trachtenberg, M., & Hyman, I. (2002). *Architecture from prehistory to postmodernity* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Turner, J. (Ed.). (1959–1987). *Encyclopedia of world art* (16 vols.). New York: McGraw-Hill.

Aristotle

(384–322 BCE)

GREEK PHILOSOPHER AND WRITER

Aristotle was one of the most important and prolific of all ancient philosophers. Born in the town of Stageira in northern Greece, Aristotle had an immediate environment of intellectual inquiry. His father, Nicomachus, was physician at the court of Macedonian King Amyntas II. At the age of eighteen Aristotle traveled to Athens to study at the Academy of the Greek philosopher

All human actions have one or more of these seven causes: chance, nature, compulsion, habit, reason, passion, and desire. • ARISTOTLE (384–322 BCE)

Plato. He remained there for twenty years, until Plato's death. Afterward, perhaps disappointed at the choice of the philosopher Speusippus as Plato's successor, Aristotle accepted an invitation from Hermias, ruler of Assos (in modern Turkey). While at the court of Hermias, he pursued both academic and private interests, beginning an extensive period of field research in the natural environment and marrying Hermias's daughter, Pythias.

After the fall of Hermias in 345, Aristotle accepted an invitation from King Philip II of Macedon to come to his court in Pella to tutor the young prince, Alexander of Macedon. The influence of Aristotle over the young Alexander has been much overstated, and their relationship seems to have been formal rather than warm. Nevertheless, Alexander did take Callisthenes, Aristotle's nephew and collaborator, with him on his expedition to Asia to act as court historian.

Shortly after Alexander's departure for Asia, Aristotle returned to Athens, where he set up his own philosophical school known as the "Lyceum" in an area outside the city walls. The philosophical style of thinking that he founded there was known in antiquity as "peripatetic," from a colonnade (*peripatos*) at the Lyceum. Aristotle remained in Athens until after the death of Alexander, when an outburst of anti-Macedonian sentiment made it unsafe for him. During this time in Athens, his wife died. Aristotle preferred not to remarry, living instead with a slave, Herpyllis, who bore him a son, Nicomachus. Aristotle died soon after his retirement from Athens, and his successor, both as the head of the Lyceum and as the heir to his papers, was Theophrastus, his longtime student, collaborator, and colleague.

Aristotle was a prolific writer on an enormous range of subjects. Like Plato, he wrote dialogues, although these survive only in fragments and quotations. The greater part of his published work is summaries and notes of his teaching. Aristotle's principal concern was, as with the pre-Socratics (a group of fifth-century Greek philosophers), the description, analysis, and understanding of the natural world. He was an acute and precise observer, and he applied his scientific acumen in an astonishing variety of fields. He was an especially skilled biological taxono-

mist, identifying literally hundreds of species of animals. He also brought geological, chemical, and meteorological observations to his study of the weather. This combination in itself is representative of his underlying methodology, which was to marry rigorous empirical observations in the field with a carefully crafted analytical and theoretic framework. This marriage was not always possible. His contributions to physics, although naturalistic in their conception, are highly theoretical.

Aristotle was not interested only in the natural world. He also took the human world as a subject for study. He was, perhaps, the first political scientist, seeking to catalogue and examine a range of constitutional arrangements. This examination led to the construction of his highly influential work, *The Politics*, which provides both a taxonomy (system of classification) and an explanation of political behavior based on theories of self-interest. It remains a core text of political theory. He also sought to collect constitutional histories of Greek city-states, and 158 constitutions were so described. For the most part, these works do not survive except as fragmentary quotations embedded in later works. The exception is the *Constitution of Athens (Athenaion Politeia)*, which was not written by Aristotle himself but probably by one of his students.

Another enormous philosophical contribution was in his employment of formal logic. Rather than examine arguments by their capacity to persuade, Aristotle preferred to test their internal consistency. In order to do this, he devised a kind of algebra of logic, which formal logicians still employ in their deliberations.

Aristotle was a genuine polymath (a person of encyclopedic learning). As such, he asserted the interconnectedness of knowledge (what the U.S. biologist Edward Wilson has called "consilience") as well as its underlying coherence. Although Aristotle was not exclusively and obsessively empirical, he preferred not to engage in explicit speculation about the nature of broad concepts. Here, later generations saw his sharpest contrast with Plato. Plato's theory of forms, in particular, and the idealism that emerges from it, have been seen as a clear and sharp contrast with Aristotle's acute and rigorous empiricism.

The philosophers have only interpreted the world, in various ways; the point, however, is to change it. • KARL MARX (1818–1883)

Much of Aristotle's work survived antiquity by translation into Arabic. His approach influenced generations of Arab thinkers as well as the scientific and, through the Italian religious philosopher Thomas Aquinas, theological traditions of medieval Europe. By then, however, Aristotle's conclusions had been turned into dogma and were overturned only by a more rigorous application of his own methodology.

Bill Leadbetter

See also Greece, Ancient; Plato; Political Thought

Further Reading

Annas, J. (1986). Classical Greek philosophy. In J. Boardman, J. Griffin, & O. Murray (Eds.), *The Oxford history of the classical world*. Oxford, UK: Oxford University Press.

Taplin, O. (1990). *Greek fire: The influence of ancient Greece on the modern world*. New York: Athenaeum.

Art—Africa

Africa has produced some of the world's earliest preserved works of art and some of its most exciting contemporary ones. Trade routes have connected Africa to Europe, the Middle East, and Asia since ancient times, and two of the world's great religions, Christianity and Islam, were established in Africa soon after they began. Africa is part of the global spread of objects, ideas, and people that characterizes the world today. Its art reflects all of these circumstances, making African art an important lens through which to view world history as well as an important field of study in its own right.

The study of African art began in the early twentieth century, and for much of its development focused solely on the area south of the Sahara and on art forms rooted in precolonial culture, which was seen as static and timeless. Egypt and North Africa were seen as separate entities. The colonial and postcolonial eras were viewed as periods of decline in African art, due to what were seen as negative outside influences in materials, techniques,

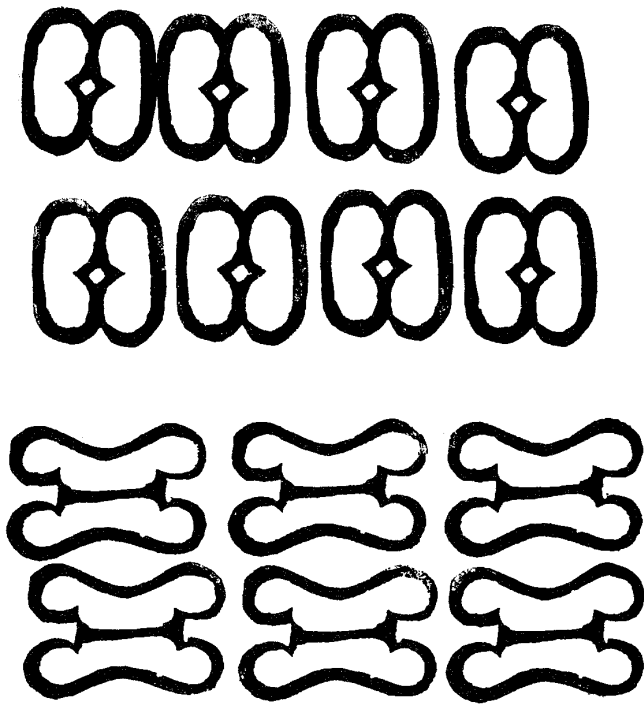
subject matter, style, and patronage. In contrast, recent scholarship takes a more inclusive and historically dynamic view. The continent is treated as an integrated whole and the changes of the past century are seen as continuing the evolution that African art has experienced throughout its history. Research today focuses on the artistic interconnections between geographic regions, ethnic groups, and time periods, and contemporary art is given equal footing with so-called traditional forms.

Ancient African Art

The earliest known works of art from Africa are the paintings of animals found on rocks in the Apollo 11 cave in southern Namibia. These have been dated 26,500–24,300 BCE, making them as old or older than the Paleolithic cave paintings of western Europe. Rock paintings and engravings are also found in East Africa and North Africa, particularly in what is now the Sahara; these depictions of animals and humans document the change from the lush, well-watered grasslands of around 8000 BCE to the arid conditions we know today. As the Sahara became drier, its human inhabitants were forced to move, and many of them settled in the Nile Valley, where they contributed to the development of ancient Egyptian and Nubian culture and art.

The earliest known sculptures from Africa south of the Sahara are those from the Nok culture of northern Nigeria, dated 800 BCE to 200 CE. Despite their early date, the Nok sculptures already show visual elements characteristic of African art from later periods. They depict facial features and body parts as abstract geometric shapes, and they alter the natural proportions of the body to emphasize the head. They portray the elaborate hairstyles and beaded body ornaments that are also an important part of the dress of many later African peoples.

During the first millennium CE the cultural features that characterized sub-Saharan African societies until the late nineteenth century were established, such as states based on sacred kingship, long-distance trade, urbanism (especially in West Africa), and various forms of social and religious organization. All of these contributed to the evolution of African visual arts.



West Africa's first city, Jenne-Jeno, was well established by 800 CE in the inland delta region of the Niger River in present-day Mali. Sophisticated and expressive terra-cotta sculptures were produced there, primarily between the thirteenth and sixteenth centuries. Some depict figures with the trappings of leadership, while others are possibly in positions of prayer, and still others are tormented by diseases or snakes. Little is known about the function of these figures, since the majority of them have been illicitly excavated. However, archaeologists believe they were used in domestic rituals, perhaps to ensure the solid foundation of a house and the family within it. Jenne-Jeno was part of a vast trading network that stretched north across the Sahara and south to the forests along the coast of West Africa. There, the site of Igbo-Ukwu in southeastern Nigeria produced lavishly decorated bronze objects using an indigenously developed lost-wax technique. Made in the ninth or tenth century, these were the regalia of a local priest-king. The city of Ile-Ife in southwestern Nigeria, still a political and spiritual center today, had its artistic flowering between 1000 and 1400. During that period the city's artists created sculptures whose pronounced naturalism stands out from most other African art, past or present. Most of these idealized portraits were made of clay, but others were made of brass and copper (which is not found nat-

Two ancient designs from Ghana.

urally in Nigeria), demonstrating Ile-Ife's long-distance trading connections.

Christianity and Islam were introduced into Africa soon after their inception and quickly found expression in African art and architecture. At first African Christianity was limited to Egypt and Ethiopia, where the rock-cut churches of Lalibela (in Ethiopia) and boldly colored illuminated manuscripts and icons constitute important contributions to Christian art. The Great Mosque at Kairouan in Tunisia, built of stone in the ninth century, is one of the oldest mosques in existence. The Great Mosque at Jenne, the Muslim city that arose next to Jenne-Jeno, is typical of West African Islamic architecture in its use of sun-dried mud bricks and strongly projecting engaged pillars and towers along its facade.

When the earliest European explorers arrived in Africa in the fifteenth and sixteenth centuries, they found several thriving kingdoms as well as smaller social units producing notable works of art. In the Kingdom of Benin in Nigeria, ivory carvers and brass casters produced thousands of works of art for use in court rituals that strengthened the spiritual power, authority, and grandeur of the Oba, or divine king. Notable among these were brass heads representing ancestors, ivory tusks carved in relief with figures from Benin history, and brass palace plaques that depicted the panoply of the Benin court hierarchy. In the Kongo Kingdom luxurious textiles of raffia fiber and fly whisks made of ivory distinguished the rulers and other wealthy and powerful people. Brass crucifixes modeled after European prototypes testified to the adaptation to local styles and ideology of objects introduced by Christian missionaries. At Great Zimbabwe, monumental stone buildings, rare elsewhere in sub-Saharan Africa, were created as the residences and ritual centers for rulers from 1300 to 1450.

The Modern Era

Most of the African art known today through museum collections and publications was made in the nineteenth century and twentieth centuries. This was a period of great change in Africa, as political, religious, and cultural practices were forced to adapt to new conditions brought



about by colonialism and, later, independence. Nevertheless, the art made at this time and the contexts in which they were used have formed the image of “traditional” African art that has dominated the study of the field. The following examples provide only a brief glimpse of the variety and complexity of African art in this period. Many of these art forms still thrive, although they continue to change, as they always have, in response to new circumstances.

The Bamana people of Mali are primarily subsistence farmers who live in independent villages led by male elders. Their art consists of wooden masks and sculptures made for the performances and rituals of men’s initiation associations. These associations embody spiritual powers, and their members wield social and political authority within Bamana villages. One such association, Komo, utilizes large wooden helmet masks depicting fantastic animals with projecting jaws and domed heads. Komo masks are covered with a thick crust of sacrificial materials, such as animal blood, plant matter, and sacred earths. These materials, along with added animal parts such as horns, tusks, feathers, and quills, imbue Komo masks with spiritual force and refer to secret knowledge used to keep the village safe from physical or spiritual harm. In contrast to the Komo mask’s intimidating appearance and serious responsibilities, the wooden headdresses of the Chi Wara association are intricate and elegant, and their performances are entertaining. They represent stylized antelopes that honor the mythical being who brought agriculture to the Bamana.

Unlike the Bamana, the Akan people of Ghana are organized into highly centralized and hierarchical states headed by hereditary chiefs who have maintained their status and authority although much of their power has been taken over by Ghana’s national government. Akan arts reflect the wealth derived from the region’s vast gold deposits and the multifaceted concepts of power associated with Akan chiefs. Prominent among Akan art forms are cast-gold chiefs’ ornaments and staffs and other regalia covered with gold leaf, all of which depict animals, humans, and objects that illustrate proverbs concerning the nature and responsibilities of leadership.

Brilliantly colored and elaborately woven silk and, more recently, rayon textiles called kente are also worn by Akan elite to signify their power, wealth, and status.

The arts of the Kuba people of the Democratic Republic of the Congo are similarly focused on leadership and power. Kuba kings are depicted in idealized portraits carved of wood that are believed to house their spiritual essence. Titleholders wear elaborate garments made of woven, appliquéd, and embroidered raffia fiber textiles along with accessories and regalia covered with cowrie shells, glass beads, and feathers. Kuba wood masks, worn at initiations and funerals, are similarly covered with a dazzling profusion of colors, patterns, and textures. It should be noted that versions of all the art forms mentioned in this article—including the regalia intended only for Kuba titleholders—are made for the foreign market.

Yet another aspect of African art is shown by the works made by the Zulu people of South Africa, pastoralists who rose to power in the early nineteenth century on the basis of their military strength. Among the Zulu masks and sculptures are rare and utilitarian objects, such as wooden headrests, milk pails, meat plates, and ceramic beer vessels, predominate. These are often decorated with chevron patterns or raised bumps that refer to the ancestors and to herds of cattle that confer wealth and prestige. Garments and ornaments decorated with colorful glass beads in geometric patterns express the wearer’s prestige, gender, and marital status. During the struggle against apartheid, some black South Africans wore beaded garments and ornaments to express their opposition to the white government’s ethnic and racial policies. More recently beaded objects have been made as part of the effort to promote awareness of the problem of HIV/AIDS in South Africa.

At the beginning of the twentieth century European avant-garde artists such as Pablo Picasso and Henri Matisse in France and Ernst Ludwig Kirchner and Max Pechstein in Germany discovered works of African art in ethnographic museums and curio shops. The geometric forms, freedom from naturalistic representations, and vibrant colors of the African objects corresponded to

Art is a kind of innate drive that seizes a human being and makes him its instrument. To perform this difficult office it is sometimes necessary for him to sacrifice happiness and everything that makes life worth living for the ordinary human being. • CARL JUNG (1875–1961)

artistic concerns in their own work, and provided a source of inspiration for European art movements such as Cubism and German Expressionism.

During the colonial period, government policies, the spread of Christianity and Islam, and new forms of education, employment, and health care often undermined the structures of political, economic, religious, and family life that had been the context for creating and using art in Africa. Art forms and cultural practices adapted to the new circumstances. Artists began to incorporate newly available materials, such as oil-based enamel paints, factory-woven cloth, and chemical dyes, and newly observed imagery, such as Western-style clothing and automobiles. These innovations demonstrate the vitality and resilience of African art and exemplify its long history of adapting to changing circumstances.

African Art Today

These developments intensified after World War II as the movement for liberation from colonial rule gained strength and finally culminated in independence for most African nations around 1960. As more and more Africans were exposed to European modes of education and art production in the second half of the twentieth century, distinctive new forms of and contexts for African art emerged. Artist workshops were established in several parts of Africa, largely by expatriate Europeans in the 1960s. The Mbari Mbayo workshop in Oshogbo, Nigeria, and a workshop founded at the National Gallery of Salisbury, Rhodesia (now Harare, Zimbabwe), are prime examples. Participants were provided with materials and studio space, but training was deliberately minimal to allow the artists' innate creativity to emerge. The results, by artists such as Twins Seven Seven of Nigeria (b. 1944) and Thomas Mukarobgwa of Zimbabwe (1924–1999), emphasize abstraction, expressive color or form, and mythic subject matter.

Another trend in modern African art developed out of the painted shop signs ubiquitous in African towns and cities. In the genre known as “urban popular painting,” works are often mass-produced and sold to African patrons as home decorations. They share the flat colors,

emphasis on consumer goods, and incorporation of text seen in advertising art, and the intuitive perspective and inconsistent shading and scale of artists without formal art education. Tshibumba Kanda Matulu (b. mid-1940s; missing since early 1980s) of the Democratic Republic of Congo is one of the most accomplished of the urban popular artists. In addition to landscapes and other idealized subjects, he produced a moving series of paintings on the history of his country.

An increasing number of African artists have studied art in colleges or art schools either in Africa or abroad, and their work reflects trends in art that are international in scope. In the 1960s Bruce Onobrakpeya (b. 1932), Uche Okeke (b. 1933), and other Nigerian artists developed a philosophy of art called “natural synthesis” that was based on the fusion of indigenous African and modern European art styles. Their works expressed both the modernity of their newly independent nation and the traditions of African culture. Similar movements arose across Africa. Since the 1990s, African artists have questioned the relevance of ethnic or national labels and even the relevance of African origin itself. Artists such as Yinka Shonibare (b. 1962 in London, to Nigerian parents), Ghada Amer (b. 1963 in Cairo, Egypt), and Berni Searle (b. 1964 in South Africa) investigate these and other concerns of the postcolonial and postmodern world through the means of conceptual art, using installation, performance, video, photography, and other worldwide contemporary art practices. When seen in its entirety, African art at the beginning of the twenty-first century is a complex mixture of local and global concerns, and ancient and innovative forms.

Kate Ezra

See also Africa

Further Reading

- Ben-Amos, P. G. (1995). *The art of Benin*. Washington, DC: Smithsonian Institution Press.
- Beumers, E., & Koloss, H.-J. (Eds.). (1992). *Kings of Africa: Art and authority in central Africa*. Utrecht, Netherlands: Foundation Kings of Africa.
- Blier, S. P. (1998). *The royal arts of Africa: The majesty of form*. New York: Harry N. Abrams.

- Bravmann, R. (1983). *African Islam*. Washington, DC: Smithsonian Institution Press.
- Cole, H. C., & Ross, D. H. (1977). *The arts of Ghana*. Los Angeles: Fowler Museum of Cultural History, University of California at Los Angeles.
- Colleyn, J.-P. (Ed.). (2001). *Bamana: The art of existence in Mali*. New York: Museum for African Art.
- Coulson, D., & Campbell, A. (2001). *African rock art: Paintings and engravings on stone*. New York: Harry N. Abrams.
- Enwezor, O. (Ed.). (2001). *The short century: Independence and liberation movements in Africa, 1945–1994*. Munich, Germany: Prestel Verlag and Museum Villag Stuck.
- Eyo, E., & Willett, F. (1980). *Treasures of ancient Nigeria*. New York: Alfred A. Knopf, in association with the Detroit Institute of Arts.
- Ezra, K. (1992). *The royal art of Benin: The Perls Collection in the Metropolitan Museum of Art*. New York: Metropolitan Museum of Art.
- Garlake, P. (2002). *Early art and architecture of Africa*. Oxford, UK: Oxford University Press.
- Hassan, S., & Oguibe, O. (2001). *Authentic ex-centric: Conceptualism in contemporary African art*. Ithaca, NY: Forum for African Arts.
- Heldman, M., & Munro-Hay, S. C. (1993). *African Zion: The sacred art of Ethiopia*. New Haven, CT: Yale University Press.
- Kasfir, S. L. (1999). *Contemporary African art*. London: Thames & Hudson.
- Nettleton, A., & Hammond-Tooke, D. (Eds.). (1989). *African art in southern Africa. From tradition to township*. Johannesburg, South Africa: Ad. Donker.
- Oguibe, O., & Enwezor, O. (Eds.). (1999). *Reading the contemporary: African art from theory to the marketplace*. London: Institute of International Visual Arts.
- Phillips, T. (Ed.). (1995). *Africa: The art of a continent*. Munich, Germany: Prestel Verlag.
- Sieber, R., & Walker, R. A. (1988). *African art in the cycle of life*. Washington, DC: National Museum of African Art, Smithsonian Institution Press.
- Visona, M., Poyner, R., Cole, H. M., & Harris, M. D. (2001). *A history of art in Africa*. New York: Harry N. Abrams.

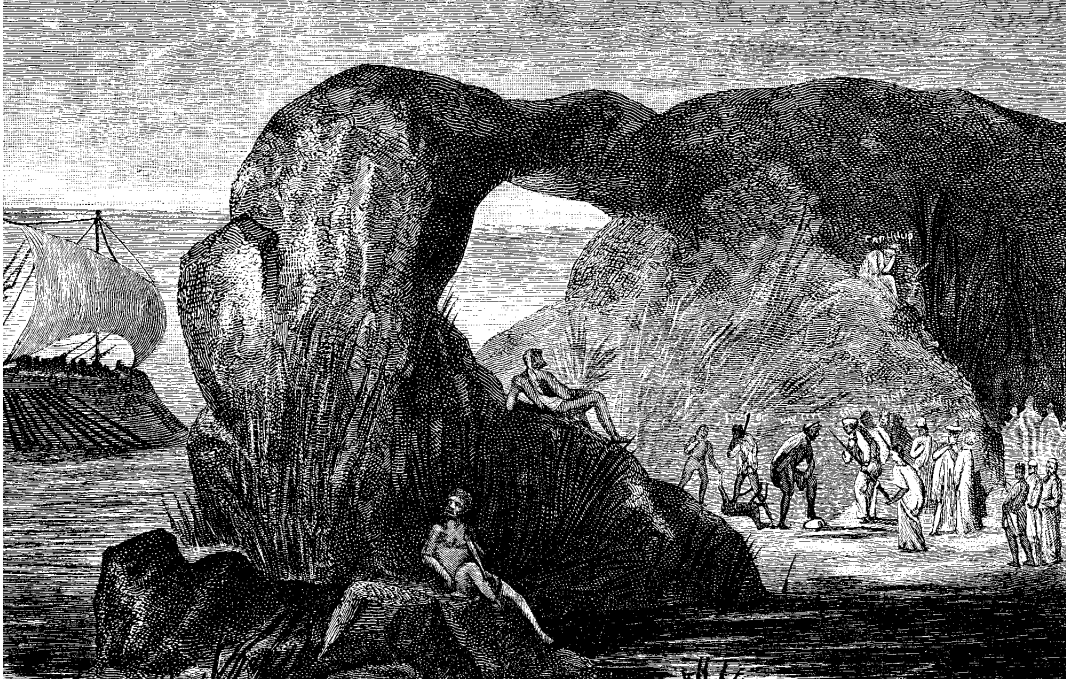
Art—Ancient Greece and Rome

The earliest monumental creations of classical Greece are the eighth-century BCE grave markers found in the Dipylon cemetery on the outskirts of ancient Athens. Their forms were familiar to everyone and had been for centuries as ordinary household pots used for storing food or mixing and decanting wine and water. Yet in their new context and in the hand of a truly inspired designer the experience created by them was of the very highest drama: These are not normal kitchen pots. They stand as

tall as a man and as broad as a temple column. The drama of these monuments is generated by an unbelievable transformation in scale and is delivered to the viewer by a shocking disconnection between the expected and the experienced. The great Dipylon pots are uniquely valuable for understanding the most basic principles of Greek monumentality, because they represent first attempts. First attempts are significant because they represent conscious choices, not simply the repetition of tradition. And wherever conscious choice can be isolated there is the opportunity of uncovering meaning, for the question can be profitably asked, “Why did they solve the problem in this particular manner?” The master of the first giant Dipylon pot asked himself the question, “How can I best design a monument that is suitable for marking and acknowledging the most profound of human transitions and transformations, from life to death, from flesh and blood to spiritual, from ephemeral to everlasting?” His answer was to create a monument that embodied a similarly incomprehensible transformation, both physical and functional, whose drama disorients the viewer, takes the viewer out of any normal, everyday frame of reference—transforms the viewer, and speaks through unambiguous metaphor of the passage from one state of being to the next. The transformation in scale and function of these great Dipylon pots lifts them out of the realm of everyday utility and into a higher, more symbolic, more universal realm. Their common reference to Homeric heroes in their painted decoration further monumentalizes these pots, further elevates them beyond the everyday.

Transformative Power and the Greek Temple

A similar conception of monumentality is expressed in Greek temple architecture, through the monumental transformation of the temple in the early seventh century BCE from a thatched and mud hut to a solid stone and terra-cotta colossus. This transformation first takes place in Corinth, which develops a distinctive style of pre-Doric monumental architecture that gradually evolves into the first full-fledged representative of the Doric order, the



A ancient mural found in Esquiline, Rome, depicting a scene from *The Odyssey*.

Temple of Artemis at Corfu (c. 580 BCE), a colony and dependency of Corinth. The transformative nature of Greek monumental architecture is enhanced by the innovation of the sculpted pediment, an invention attributed to the Corinthians by the fifth-century poet Pindar and seemingly confirmed by its earliest appearance on Corfu, a Corinthian colony and dependency. More than any other feature the early sculpted pediments with their great frontal monsters condition the spirit of approach to the temple: If the approach to the temple was intended to reflect the approach to divinity, the purpose of the monsters was to transform any pilgrims who dared approach, to transport them beyond the protective boundaries of everyday life and into the contemplation of the terrifying nature of divinity and their relationship to it. The purpose of the great emblematic sculptural groups in the pediments was—like religious ritual—the spiritual transformation of the worshipper. Over the course of the sixth century BCE the pedimental instruments of engagement and confrontation become diluted, metamorphose from monsters to more familiar, less intimidating, human-shaped figures, indicating a change in the conception of temple divinity, from abstract, nonanthropomorphic, and chthonic to anthropomorphic Olympian sky gods. This gradual humanization of divinity and consequent divinization of humanity is a theme that unites much of Greek art.

Egyptian Influences

The nature of monumental Greek art and architecture was profoundly affected by the opening of the trading colony Naukratis in Egypt in the later seventh century BCE. From this new and intense contact with Egypt came the inspiration for the peristyle (the continuous colonnade) in Greek temple architecture. The peristyle gave architectural expression to one of the most basic rituals of Ionian cult activity, religious procession: Like pedimental sculpture, religious procession serves as a transforming ritual that prepares the worshipper for the approach to divinity. Emulating the processional function of Egyptian colonnades, the colossal peristyles of Ionia led through their formal arrangement to the front of the temple, then to the axis, then to the interior. Peristyles were also adopted on the Doric mainland, but in that context their nature was not processional. Instead, a sense of hieratic direction and procession was lent to early Doric architecture by its pedimental sculpture, which followed and further established the early Greek hierarchy of narrative and emblem in religious art: Storytelling is associated with a secondary position, the more human realm, at the back of the temple, while the more abstract convention, the emblem, is appropriate for the suggestion of divinity at the front of the temple.

It was also through Naukratis that the Egyptian conception and technique of monumental freestanding sculpture

*Art is long, and Time is fleeting, And our hearts, though stout
and brave, Still, like muffled drums, are beating Funeral marches
to the grave.* • HENRY WADSWORTH LONGFELLOW (1807–1882)

was introduced to Greece. Beginning in the late seventh century, kouroi (male) and korai (female) appear as votives and grave markers and, perhaps, as cult images. There is probably a causal relationship between the appearance of this sculpture and the coincidental relegation of pottery to an almost exclusively non-monumental realm. The physical nature of kouroi and korai makes them particularly appropriate as indicators and inspirers of spiritual transition. Like the religious sculpture of Egypt, they are represented as highly formalized compositions, more religious emblem or hieroglyph than naturalistic representation of humans. Their tight symmetry and stylization intentionally and effectively separates them from the strictly human realm, removes them from the everyday, and places them in a mediating position between human and divine. On the other hand, as in vase painting and pedimental sculpture, an increasing interest in the examination of things human is witnessed in sixth-century freestanding sculpture in the increasingly naturalistic modeling of the body. This parallels the change to the more human conception of temple divinity as represented in pedimental sculpture, and reflects the increasingly central role humans play in the Greek conception of the cosmos.

The Classical Period

The increasingly detailed examination in art of the human condition, physical and emotional, continued unbroken into the classical period (beginning in 480 BCE with the Persian sack of the Athenian Acropolis). This movement toward naturalism, however, was potentially inimical to the goals of monumentality, as the goals of monumental art and architecture had always been to lift viewers out of the ordinary, beyond the everyday, and into the contemplation of forces greater than themselves: How could increasingly human representations lift humans beyond their own environment, inspire in them the contemplation and understanding of something superhuman, of the divine realm? This seems to have been recognized by the mid-fifth-century sculptor Polykleitos, who reintroduced the formal symmetry of kouroi to his compositions, though along diagonal axes rather

than in the strictly vertical and horizontal framework of sixth-century sculpture. The decision of Phidias, the sculptor of the Parthenon, to ignore the developing techniques of representing individual characteristics of age, emotion, and character in favor of uniformly abstracted, ageless, “idealized” figures similarly indicates an analytical appreciation of the traditional character and techniques of monumental Greek art.

The Periclean building program on the Athenian Acropolis, undertaken in the aftermath of the Persian destruction of Athens, is perhaps the most elaborate expression of monumental art and architecture ever created in Greece. Its religious roots and purpose are evident in the detailed expression of religious procession through the organization of building types, the organization of their pedimental sculpture, and the incorporation of the processional language of Ionic temple architecture into the Doric tradition of the Acropolis. Its political and historical context and tradition are expressed through the many references to the Persian War, both metaphorical and literal, through the cults of legendary heroes, and through the use of the Ionic order as a reflection of Athens’s ancient genetic and linguistic connections with Ionia and of its present position at the head of an Ionian alliance against the Persians. The explicit celebration of the accomplishments and traditions of the Athenians in the religious monuments of their central sanctuary is a remarkable deviation from canon and represents an extreme evolution of the humanization of divinity and divinization of humanity in Greek art and architecture.

After the hiatus of Phidian sculpture, the examination of the human condition in ever-increasing detail recommenced with renewed energy in the fourth century BCE and soon resulted in the monumental representation of generalized but, nevertheless, individual human beings. In the Hellenistic Age (the period beginning with the death of Alexander the Great in 323 BCE and ending with the Battle of Actium in 31 BCE) the gradual humanization of divinity in Greek art culminated in the worship and monumental representation of Hellenistic rulers as gods. Similarly, while mythical or divine representation or ref-

erence served as an elevating agent of monumentality in earlier Greek art, reference to, or even quotation of, the buildings and sculpture of the Periclean Acropolis became a common agent of monumentality in the official art and architecture of the Hellenistic kingdoms of Greece, particularly of Pergamon.

Corinth and the Etruscans: Greek Influence on Rome

The connections between Greece and Rome are almost as old as the cultures themselves, and the origins of monumental temple architecture in Rome were traced by the Romans themselves back to mid-seventh-century Corinth. Around the time the Corinthians were designing and building the first truly monumental temple in Greece, the old ruling oligarchy was overthrown and expelled from Corinth. When one of the deposed oligarchs, Damaratus, fled by ship from Corinth he carried with him a host of artisans, including terra-cotta workers, craftsmen we now know were most responsible for the monumental character of that temple—through their invention of the tiled roof. Damaratus sailed with them to the west coast of Italy and settled in the Etruscan town of Tarquinia, where Damaratus's artisans introduced the Etruscans—who became the greatest terra-cotta sculptors of the Mediterranean—to the art of molding terra-cotta. So, in addition to developing the first tradition of monumental architecture in Greece, Corinth was also a crucial source for the origins of monumental sculpture and architecture in Etruria. Damaratus then extended Corinth's artistic and cultural influence to Rome itself through his half-Etruscan son Lucumo, who

later took the name Lucius Tarquinius Priscus and became the first Etruscan king of Rome. On the heights of the Capitoline Hill in Rome, the central peak and religious center of Etruscan *and* Latin Rome, Tarquinius initiated the construction of the first monumental temple in Rome, dedicated to Jupiter, Juno, and Minerva, the same three divinities who in their Greek guise of Zeus, Hera, and Athena dominated the central height and religious center of Corinth. This cult of the Capitoline Triad became the central cult of the Roman republic and empire, and the triple-chambered plan of their temple, completed after the Etruscans were expelled from Rome at the end of the sixth century BCE, formed the template for all subsequent Capitolia.

From the Etruscans the Romans inherited the tradition of monumental wood and terra-cotta temple architecture. They were also deeply influenced by Etruscan sculpture, painting, and religious and political institutions. The tradition of Roman portraiture, a paradigmatic manifestation of an innate Roman fascination with the literal details of history, finds its roots in Etruscan funerary

sculpture that goes back to the seventh century BCE. As much as any other art form, the super-realistic, warts-and-all portraiture of republican Rome (509–27 BCE) embodies the traditional Roman dedication to history, family, and age-old values. And as much as any other art form, the conception and appearance of Roman republican portraiture stands in opposition to the traditional Greek conception of monumental art. Through generalization and



An engraving on the back of a mirror found on Crete.



A sculpture of the Athenian owl, symbol of Athena, the patron goddess of Athens, in 2003.

stylization monumental Greek art was intended to lift the viewer out of the everyday and into the consideration of superhuman forms and forces; Roman republican portraiture encouraged the contemplation of the thoughts and actions of specific, individual human beings through the reproduction of their most individualized, idiosyncratic physical attributes. A similar dichotomy is expressed in the contrast between the native tradition of Roman historical relief sculpture, which depicts the literal details of actual historical events, and the more generalized, emblematic references to history made in the monuments of the Greeks.

An Evolving Balance

The most profound wave of Greek influence on the Romans came with the Roman sack of Corinth in 146 BCE. The city was stripped of its sculpture and painting and almost any movable object of value, and it was all shipped to Rome, where it kindled a mighty taste for things Greek and antique and injected a permanent and powerful strain of Hellenism into the art and architecture of Rome. From the second century BCE Roman art and

architecture can be read as a constant and intentional shifting—depending upon the specific purpose of the monument—of the balance of native Italic elements and those adopted from classical Greece. The Romans continue to build their temples according to their own traditional Tuscan plan (adopted from the Etruscans), but they consistently monumentalize those temples by veneering them with the materials and decorative orders of the Greeks.

A century later the emperor Augustus (reigned 27 BCE–14 CE) claimed to have found Rome a city of brick and left it a city of marble. Augustus's statue at Prima Porta illustrates well the early integration of Hellenic and Italic forms and spirit in the service of the official message of the state. It combines a recognizable portrait head of Augustus with the body of the famous Doryphoros, the "Spearbearer" of the fifth-century BCE Greek sculptor Polykleitos. The Doryphoros is presented in the armor of a Roman general, the commander in chief, and wears a cuirass that carries the representation in relief of a historical event, a military accomplishment significant to the official image of Augustus. A recognizable, individual human being and a specific historical event are magnified, elevated to the realm of the superhuman through their association with fifth-century Greece, with Periclean Athens and its own remarkable cultural and military accomplishments, the apex, in the Roman mind, of human achievement. The same mixture and purpose is found in Augustus's Altar of Peace (the *Ara pacis*), which presents a historical procession of individually recognizable Romans in the guise of the religious procession depicted on the Ionic frieze of the fifth-century Parthenon in Athens.

Augustus and his Julio-Claudian successors (reigned 14–68 CE) continued to present themselves in official art and architecture in the guise of fifth-century Greece. Even their portrait heads, while recognizable as individual emperors, were generalized and idealized in the manner of classical Greek art. When, however, their grotesque excesses and abuses of power led to the overthrow of Nero (reigned 54–68 CE) and the ruling dynasty, the first Flavian emperor, Vespasian (reigned



69–79 CE), openly distanced himself from the policies and character of his predecessors by changing the balance in the language of official state art. Instead of representing him as Doryphoros, Vespasian's official images returned to the style of the old republican portraits—straightforward, literal, unpretentious, uniquely Roman—and proclaimed a return to the traditional values of the republic. In architecture he encouraged the use of concrete, a purely Roman building material and the most important Roman architectural contribution to posterity. The Amphitheatrum Flavium, the Colosseum, was not only the largest and most elaborate concrete structure in Rome, but it also denied the divine pretensions of the Julio-Claudian emperors and their profligate abuse of the Roman treasury for their own individual desires through its function as an entertainment center for the common people and through the site of its construction, on the newly filled-in lake in the center of Nero's notorious Golden House, or Domus Aurea. This structure was built with state funds in the center of Rome as Nero's personal pleasure villa; he appropriated over three hundred acres in the center of the city for its construction. Paradoxically, Nero's architects had also made great use of concrete, but in the private context of Nero's Golden House, where they experimented with the possibilities of concrete for molding interior space in new and fantastic ways. Their discoveries were profoundly influential in creating a Roman architecture of interiors.

The ways in which concrete and marble are used in Roman architecture can serve as a metaphor for the Roman character. In general, concrete formed the structure of the building, marble its veneer: carefully carved marble revetment could make a concrete building look as elegant as the Parthenon. Like the traditional values of the republic, concrete is economical, practical, structural, purely Roman. Marble, on the other hand, as employed in Roman buildings is expensive, luxurious, superficial, and foreign. While concrete reflects the native character of the Romans, marble reflects the aspirations of the Romans to the cultural heights of Pericles and fifth-century Athens.

Not until the reign of the emperor Trajan (reigned 98–117 CE) is concrete and its protective brick facing presented in unveneered reality as an appropriate surface for monumental architecture. The great curved façade of the Markets of Trajan reflects the molded nature of concrete, and the unstuccoed, unveneered brick surface reveals the fabric and techniques of its structure and initiates a new aesthetic in Roman architecture. Appropriately, this vast concrete building is dedicated to the practical pursuit of business; immediately next door, the contemporary Forum of Trajan, whose function is the symbolic representation of the aspirations and accomplishments of the Roman state under Trajan, is presented in the full glory of the classical Greek marble architectural orders.

Perhaps the most remarkable integration of traditional Roman and classical Greek architectural forms and symbols is found in the Pantheon of Trajan's successor Hadrian (reigned 117–138 CE). Here the façade of a Greek temple is wedded to a completely un-Greek and purely Roman structure, a concrete, domed cylinder. In addition, the most elaborate architectural symbol of religious transition ever created in Greece, the Propylaea (the great gateway of the Periclean Acropolis), is directly referenced in the stacked pediments of the façade, which, in turn, are combined with the uniquely Roman symbol of transition, the triumphal arch, to form the most explicitly processional temple entrance ever created in the classical world. The entrance leads into an immense open interior whose dome (representing the vault of the heavens) is the culmination of decades of experimentation and mastery of the techniques and design of concrete architecture. Here, rather than emphasizing the distinct natures of Greek and Roman architecture, the expressive potential of both is consciously synthesized to create a temple uniquely appropriate to the inclusive, international worship of "all gods," (pan-theon) and consequently to promote Hadrian's own inclusive, international conception of the Roman empire.

Succeeding emperors continued to create monumental art and architecture in the tradition of Hadrian and his predecessors, and continued to explore the possibilities of concrete as a monumental architectural medium. Classical Greek and native Italic elements continued to be

used to express specific official messages and attitudes, though on the whole that balance shifted toward the Italic over the next two centuries. In sculpture this shift expressed itself in part in the increasing interest in frontal representation and in simple, clearly outlined figures. That, coupled with a new spirituality that increasingly expressed itself in an emphasis on the eyes, gradually led to the more emblematic, iconic relief sculpture and portraits of the late empire. Constantine the Great (Constantine I, reigned 306–337) employed the tools of official art and architecture to great advantage, and as the first of the Roman emperors to convert to Christianity, began to direct those tools toward the glorification and propagation of his new religion.

Robin F. Rhodes

See also Greece, Ancient; Roman Empire

Further Reading

- Berve, H., Gruben, G., & Hirmer, M. (1963). *Greek temples, theaters and shrines*. London: Thames and Hudson.
- Biers, W. R. (1996). *Archaeology of Greece: An introduction*. Ithaca, NY: Cornell University Press.
- Coulton, J. J. (1977). *Ancient Greek architects at work*. Ithaca, NY: Cornell University Press.
- Dinsmoor, W. B. (1975). *The architecture of Ancient Greece* (3rd ed.). New York: Norton.
- Hannestad, N. (1986). *Roman art and imperial policy*. Aarhus, Denmark: Aarhus University Press.
- Kleiner, D. E. E. (1992). *Roman sculpture*. New Haven, CT: Yale University Press.
- Lawrence, A. W. (1983). *Greek Architecture* (4th ed). Harmondsworth, UK: Penguin Books.
- Ling, R. (1991). *Roman painting*. New York: Cambridge University Press.
- MacDonald, W. L. (1982). *The architecture of the Roman Empire* (Rev. ed.). New Haven, CT: Yale University Press.
- MacKendrick, P. (1983). *The mute stones speak*. New York: Norton.
- Osborne, R. (1998). *Archaic and classical Greek art*. Oxford, UK: Oxford University Press.
- Pollitt, J. J. (1972). *Art and experience in classical Greece*. New York: Cambridge University Press.
- Pollitt, J. J. (1986). *Hellenistic art*. New York: Cambridge University Press.
- Ramage, N. H., & Ramage, A. (2001). *Roman art: Romulus to Constantine* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Rhodes, R. F. (1995). *Architecture and meaning on the Athenian Acropolis*. New York: Cambridge University Press.
- Rhodes, R. F. (2000). The classical world. In D. Cruickshank (Ed.), *Architecture: The critics' choice* (pp. 14–45). New York: Watson-Guption Publications.
- Rhodes, R. F. (forthcoming). *A story of monumental architecture in Greece*. New York: Cambridge University Press.
- Scully, V. (1962). *The earth, the temple, and the gods: Greek sacred architecture* (Rev. ed.). New Haven, CT: Yale University Press.
- Sear, F. (1983). *Roman architecture*. Ithaca, NY: Cornell University Press.
- Stewart, A. (1990). *Greek sculpture, an exploration*. New Haven, CT: Yale University Press.

Art—Central Asia

Central Asian art needs to be clearly distinguished from the other artistic traditions of Inner Asia. Geographically, the term denotes the arts of modern-day Afghanistan, Pakistan, northern India, Nepal, Xinjiang Province in northwestern China, Tajikistan, Kyrgyzstan, Uzbekistan, and Turkmenistan, whereas Inner Asia also includes Mongolia, the Gobi, and central Siberia. It is culturally and stylistically different from Islamic, Indian, Chinese, and Russian arts, although these styles have all been practiced within the region. Historically, Central Asian art dates from prehistoric times to the present, with the ancient Silk Roads era being the most significant. Media have included sculpture and engraving in a variety of stone and stucco, wall paintings, coin engravings, and textiles.

The art of Central Asia is critically important to world historians because it provides evidence of the extraordinary synthesis of cultural influences that so typify the history of the region. This blending of Mediterranean, Iranian, Indian, Chinese, steppe nomadic, and local techniques and motifs that occurred at the “crossroads of Eurasia” resulted in the emergence of several major syncretistic schools of art. In the oasis towns of Central Asia, artists from a variety of cultures worked together to produce both sacred and secular art, which was then transported along the trade routes to profoundly influence the subsequent art of East Asia in particular. In an attempt to make some sense of this extraordinary synthesis for the world historian, this essay offers a brief survey of Central Asian art in a chronological framework.

Pre-Achaemenid

The history of Central Asia from the late Neolithic period (c. 6000–3000 BCE) until quite recently has been characterized by the interaction between sedentary agrarian and nomadic pastoralist communities. The original inhabitants of the region lived in small semisedentary settlements. More substantial colonization followed as a direct result of the migration of Indo-European- and Indo-Iranian-speaking pastoralists into the region in three waves from approximately 4000 BCE. An important urban civilization emerged in the valleys of the Amu Dar'ya and Zeravshan rivers late in the third millennium BCE, known as the Bactrian-Margiana archaeological complex (BMAC). The BMAC oasis sites were probably agricultural communities developed to facilitate trade and exchange between the indigenous sedentary agriculturists and the neighboring steppe-nomadic pastoralists, evidence of the early emergence of a tradition of cultural exchange.

Artifacts discovered in BMAC sites—particularly battle-axes with cross-guards, mirrors, pins, bracelets, and rings—demonstrate high levels of craftsmanship and stylistic borrowings. BMAC potters used the wheel from as early as the third millennium BCE and decorated their works with geometric designs or stylized renderings of large animals and goats. The iconography of seals, cylinders, and metal ornaments is clearly of steppe-nomadic tradition—which includes both realistic and fantastic animal images (particularly horses), mythical raptor-headed creatures, hunting and riding images, and some abstract symbol—while later artifacts are more Iranian in appearance, featuring human figures in full-frontal or profile poses, often sacrificing over a small fire altar. The BMAC civilization declined late in the second millennium, although soon after 1000 BCE there is evidence of renewed urbanization and the construction of extensive irrigation systems. These settlements were extensively fortified, providing evidence of increased levels of conflict during what is known as the Scythian era (c. 1000–200 BCE).

The militarized Scythian tribes, who were active in Central Asia from the seventh century BCE, were respon-

sible for the production of superbly decorative objects, particularly jewelry and trappings on horses, tents, and wagons. Scythic representations of real or imagined beasts were worked into a wide range of materials, including wood, leather, bone, appliqué felt, bronze, iron, silver, gold, and electrum. Outstanding examples are gold belt buckles, often with turquoise inlay, and 30-centimeter-long gold stags with their legs tucked under them, which may have been used as central ornaments on shields. The easternmost outpost of Scythian culture was probably in the Ili River valley (in present-day southeastern Kazakhstan and northwestern Xinjiang Province, China), where they may have influenced the artistic tastes of the Xiongnu tribal confederation. A range of personal ornaments discovered at the major Xiongnu site of Noin-Ula depict fantastic animals with raptor-headed appendages, similar to those created by steppe-nomadic peoples from further west.

An important sedentary civilization also emerged in the Indus Valley during the third millennium BCE. The excavation of large cities such as Mohenjo Daro and Harapa provides evidence of a tightly organized, architecturally sophisticated urban society with straight streets intersecting at right angles, sophisticated drainage systems, and high standards of pottery production. Venus fertility figurines have been found at various sites, demonstrating extensive levels of cultural exchange with the civilizations of southwestern Asia. Stamps and seals from the Indus civilization depict naturalistic animals, but also horned humans, unicorns, and other large figures that might be gods, indicating possible steppe-nomadic influence upon artists.

Further north in the Indus Valley some 35,000 petroglyphs and inscriptions have been discovered, and others are known in Afghanistan and Tajikistan. The oldest carvings, which are pecked or chiseled into the surface of boulders scattered on the riverbanks and terraces, are prehistoric, mostly depicting animals, hunting scenes, and demonlike creatures. The petroglyphs continued to be cut until the fifteenth century BCE and provide evidence of the changing religious practices of travelers along this branch

of the Silk Roads, notably Buddhism and Islam. They depict an astonishing array of stupas, the Buddha in various poses, and bodhisattvas; later petroglyphs feature Indian and Iranian iconography, including some Zoroastrian and later Islamic symbols.

Achaemenids and Greeks

The relative isolation of small, fortified city-states in Central Asia made them vulnerable to attacks from the armies of major agrarian civilizations to the west. By the mid-sixth century BCE the Achaemenids (an Iranian dynasty that held power from the seventh century BCE through 330 BCE) had incorporated Bactria (ancient Afghanistan) and Sogdia (ancient Turkmenistan and Uzbekistan) into their empire. These regions were thus exposed to the artistic traditions and belief systems of Iran until the arrival of Alexander of Macedon in 329 BCE. This long period of incorporation into the durable and tightly organized “Persian empire” helped establish the region as part of a Eurasia-wide cultural exchange network. Central Asia was exposed to Zoroastrian iconography, and small votive figurines produced by potters in Bactria and Sogdia were designed to be used in fire-worshipping ceremonies. The Achaemenids also introduced the first coins into Central Asia, establishing a tradition that would culminate under the Graeco-Bactrians in arguably the finest example of the coin engravers’ art known in the ancient world.

Alexander campaigned in Bactria and Sogdia for two years, establishing a number of cities, including Alexandria-Kapisu (Begram in Afghanistan), which the Kushans later made their capital. Alexander’s campaign reinforced the process begun by the Achaemenids and further linked Central Asia to the civilizations of southwestern Asia and the Mediterranean. Greek populations flooded into the region during the subsequent Seleucid (Macedonian Greek) era (312–64 BCE), founding a string of Greek towns such as Ay Khanum on the southern banks of the Amu Dar’ya, complete with classical Greek temples and theaters. The Seleucids also issued tetradrachms that are masterpieces in the Greek tradition of coinage, with superb portraits of kings on the reverse that

are sometimes realistic enough to reveal symptoms of disease, such as goiter.

Around 250 BCE Diodotus, the Seleucid satrap of Bactria, revolted and declared Bactria an independent state. During the subsequent Greco-Bactrian era a series of kings expanded their realms into Sogdia and Fergana to the north, Parthia to the west, and Kabul and the Indus Valley to the south. Soon after 190 BCE, Demetrius extended Greek interests into northern India, forging a link between the Hellenistic and Indian cultures that was strengthened under his successors Eucratides and Menander.

As well as forging a link between Hellenic and Indian culture, the most significant artistic legacy of the Greco-Bactrians is their superb coinage, which was issued in silver and bronze. The royal portraits are masterpieces of coin engraving; facial features are so realistically and individually realized as to surpass even the Seleucids. Euthydemus is depicted with a thick neck, full cheeks and chin, and a determined mouth; Eucratides wears a helmet with bull’s horns above his naked torso; Demetrius wears an elephant-scalp headdress and formidable expression; and Antimachus has unique facial features reflecting his mixed Greek and Sogdian blood. The coins strongly influenced the subsequent issues of the Kushans, under whom Central Asian art reached the heights of syncretistic achievement.

The Kushans: Gandharan and Mathuran Art

The invasion of Bactria by the Yuezhi confederation in 130 BCE ushered in a period often described as the Golden Age of ancient Central Asia. By around 50 BCE the Yuezhi had transformed themselves into the imperial Kushans, and for the next 275 years the stability of their regime facilitated astonishing levels of trans-Eurasian cultural exchange along the various Silk Roads, which linked the Mediterranean, Parthian, Indian, Chinese, and steppe-nomadic worlds into a single world system for the first time in history. Central Asian art was transformed by this interaction, and although a number of distinctive Kushan styles are known, the most significant are those that emerged at Gandhara and Mathura.

Historical sense and poetic sense should not, in the end, be contradictory, for if poetry is the little myth we make, history is the big myth we live, and in our living, constantly remake. • ROBERT PENN WARREN (1905–1989)

Gandhara (located near Peshawar in Pakistan) had been incorporated into the Greco-Bactrian kingdom, and the art that evolved there owed much to Mediterranean, Indian, and local traditions. Gandharan sculpture (along with Kushan coinage) has long been associated with the earliest depictions of the Buddha, who had previously been represented only by symbols such as a footprint or umbrella. In an attempt to express for the first time the idea of his divinity in human form, Gandharan sculptors (who worked in hard, gray schist) turned to statues of Greek and Roman gods. The earliest Buddhas feature drapery that hangs in loose folds but still outlines the form and movement of the body beneath. Many are similar to the contemporary statues of deified Roman emperors, and the head recalls the Greek god Apollo. Also remarkable in Gandharan art are flat sculptures worked on slabs of schist (often used as stair-riser reliefs) depicting both religious and secular scenes. These pieces abound in details from everyday life—comfortable beds, food and wine, dancers and musicians, and realistic portraiture—and their extraordinary mixture of Indian symbolism, Romano-Hellenistic architectural details, and steppe-nomadic costumes are almost the quintessential example of Central Asian artistic synthesis.

In later phases (Gandharan art continued until the sixth century CE) the remarkable blending of local, Eastern, and Western styles continues to be found in Buddhas and bodhisattvas that combine Greek symmetry with Indian sensual spirituality and serenity. In turn, these syncretistic images went on to haunt later East Asian images of the Buddha, particularly the Chinese. So stylistically unmistakable is the sculpture of Gandhara that early-twentieth-century archaeologists were able to map the spread of Kushano-Gandharan influences to the eastern edge of the Tarim Basin, based primarily on the continuing Greek and Roman stylistic influences observed in Buddhist sculpture they had unearthed.

Mathuran artists (based on the Jamuna River, a tributary of the Ganges) worked mainly in white-spotted red sandstone and were clearly influenced by the Gandharan synthesis. Whether standing or seated, the Buddha is depicted with broad shoulders and a large chest, and

with legs apart and feet firmly planted, conveying a sense of power and energy. Mathuran secular art is notable for its sensual depictions of women and also for a superb series of portraits of the Kushan kings. Particularly impressive is a low-relief (unfortunately headless) sculpture of Kanishka (reigned c. 129–152 CE) in which he is depicted with sword and mace, and with his feet planted in a masterful manner. The king wears nomadic dress, and although the work was undertaken in Mathura (the Kushan winter capital), the style and concept seem to stem more from a Scythic-Parthian tradition than an Indian one. However, the arts of both Gandhara and Mathura did contribute profoundly to the formation of the classic style of Indian art, which reached its maturity during the three-century-long Guptan period.

First Millennium of the Common Era

Following the death of the Kushan ruler Vasudeva around 228, the Kushans were replaced in Central Asia by the Iranian Sasanians, who by maintaining strong trade contacts with Tang dynasty China (the Tang were in power from 618 to 907) ensured the continuation of the tradition of artistic synthesis. Tang art—including flasks and pottery figurines—was clearly influenced by Central Asian and Western prototypes brought to China by pilgrims and traders. Mahayana Buddhism was by now firmly entrenched in Central Asia, and much of the art created during the first millennium CE was produced in monasteries across the Tarim Basin. Many of the more portable pieces were pillaged by European archaeologists in the nineteenth and twentieth centuries and now reside in institutions all over the globe. Notable are the superb wall frescoes produced around 500 to 800 at Kizil, which demonstrate Sasanian, Indian, and Chinese influences; Buddhist wall paintings from Kuqa (from around 900 to 1000) in west central Xinjiang and Uighur frescoes from Bezeklik and Sorcuk (both displaying Sogdian, Persian, and Indian influences); and the astonishing library of illustrated scrolls discovered by the archaeologist Aurel Stein in the Monastery of a Thousand Buddhas near Dunhuang in north central China. Included among the latter was the

Art washes away from the soul the dust of everyday life. • PABLO PICASSO (1881–1973)

oldest block-printed book so far known, a copy of the Diamond Sutra dating from approximately 860. Cultural and stylistic influences continued to move in both directions. The sculpture and painting produced in monasteries in Turpan in Xinjiang, for example, influenced the subsequent Buddhist art of Tibet, while the funeral art of the Uighurs deeply affected Mongolian painting. Many superb examples of Manichaean art are also known throughout Central Asia, documenting the spread of the “religion of light” eastward from the Sasanian realm as far as the Tang capital of Changan (near present-day Xian).

Not all the art of Central Asia was so easily transportable. In the high Bamiyan valley in northern Afghanistan, at a crossroads of two Silk Roads routes, a large monastic complex was responsible for the carving of monumental figures of the Buddha. Until just prior to its destruction in 2001 by the Taliban, the tallest of the colossal statues (52.5 meters) was the single largest Buddha known in the world. The Bamiyan Buddhas were massive reliefs set deep in the side of a cliff, inspired by the Indian rock-cut architecture of Ajanta in south central India. They were completed in a naturalistic, post-Gandharan style strongly influenced by both Parthian and local traditions, and in turn inspired the carving of another group of colossal Buddhas at Yungang in the Chinese province of Shanxi (northeastern China), completed late in the fifth century.

Modern Era

Outside of the scope of this brief outline is a consideration of the splendid cultural legacy of Islam that has been such a dominant influence upon Central Asian art from late in the first millennium CE until today. The textile arts of the region also deserve an essay to themselves, particularly as the great trade routes were named after silk. Textiles are of paramount importance to world historians because of the role they have played as mediums of exchange and as indicators of social position, ethnicity, and religion. Textiles were used as currency, to pay taxes, and as symbols of imperial patronage, and yet the fragile nature of the medium has meant that only a fraction of those produced have survived. One of the largest col-

lections of ancient Central Asian textiles so far discovered are those associated with the desiccated mummies found at sites all over Xinjiang, analysis of which has been tentatively used to suggest a historical connection between the Tarim Basin mummies and the Bronze Age migration of Indo-European-speaking migrants into the region.

The richness of color, pattern, and texture that so distinguishes the region’s textiles is a product of the intense transfer and blending of ideas, motifs, techniques, and materials between nomadic and sedentary peoples, a tradition that continues in the twenty-first century. In the contemporary nations of post-Soviet Central Asia, weavers, potters, ceramic masters, jewelers, and painters from both sedentary and seminomadic traditions continue to practice their art. However, the Soviet policy of forcing artists and craftspeople to work in collective factories and prohibiting the production of individual work had a devastating effect on many of the traditional arts of Uzbekistan, Turkmenistan, Kyrgyzstan, and Tajikistan. In some cases, archaeologists of the era also destroyed later layers of artistic artifacts in the process of excavating older periods. As a result, the few masters who remain in the region today carry a precious living legacy of tradition and technique.

Since the Central Asian republics gained independence in the 1990s, nongovernmental organizations such as UNESCO have played an important role in the renaissance of traditional arts and crafts through grants to artists and assistance in the international marketing of their works. One result of this well-intentioned strategy has been that many artists now concentrate on producing commercial works for foreign buyers as they adjust to market realities, and the creative process, particularly in terms of original modern art, has suffered. Of course, Central Asia has always been a region characterized by the tensions between local ethnic traditions on the one hand and a diverse range of foreign influences on the other, as a result of its geographical location as a hub for trans-Eurasian cultural exchange. It remains to be seen how Central Asian artists of the twenty-first century will balance the seemingly opposing forces of tradition and foreign influence, although it has been this very dynamic



that for over five thousand years has resulted in the production of some of the most profoundly influential art in world history.

Craig Benjamin

Further Reading

- Barber, E. J. (1991). *Prehistoric textiles*. Princeton, NJ: Princeton University Press.
- Benjamin, C. (1998). An introduction to Kushan research. In D. Christian & C. Benjamin (Eds.), *Worlds of the silk roads: Ancient and modern* (Silk Roads Studies Series No. 2, p. 31–49). Turnhout, Belgium: Brepols.
- Bunker, E. C., Watt, J. C. Y., & Sun, X. (2002). *Nomadic art from the eastern Eurasian steppes: The Eugene v. Thaw and other New York collections*. New York: Yale University Press.
- Christian, D. (1998). *A history of Russia, Central Asia and Mongolia: Vol. 1. Inner Eurasia from prehistory to the Mongol Empire*. Oxford, UK: Blackwell.
- Errington, E., & Cribb, J. (Eds.). (1992). *The crossroads of Asia: Transformation in image and symbol in the art of ancient Afghanistan and Pakistan*. Cambridge, UK: Ancient India and Iran Trust.
- Frye, R. N. (1996). *The heritage of Central Asia*. Princeton, NJ: Princeton University Press.
- Litvinsky, B. A., & Altman-Bromberg, C. (1994). The archaeology and art of Central Asia: Studies from the former Soviet Union. *Bulletin of the Asia Institute*, 8, 47.
- Pugachenkova, G. A., Dar, S. R., Sharma, R. C., Joyenda, M. A., & Sidiqi, H. (1994). Kushan art. In J. Harmatta, B. N. Puri, & G. F. Etemadi (Eds.), *History of civilizations of Central Asia: Vol. 2. The development of sedentary and nomadic civilizations: 700 B.C. to A.D. 250* (pp. 331–395). Paris: UNESCO.
- Stein, A. (1933). *On Central Asian tracks*. London: Macmillan.
- Tanabe, K. (1993). *Silk road coins: The Hirayama collection*. London: British Museum.

Art—East Asia

By the first century of the common era, imperial Rome was connected to China by a tenuous filament of silk that stretched for more than 11,000 kilometers from Luoyang, the capital of the Han dynasty, to Rome. Roman weavers, lacking the coveted silkworm, were dependent on the import of Chinese raw materials to produce the luxury fabric Roman high society so craved. The enormous distances between the two cultural centers inhibited the flow of bulky goods, however, and though

the exchange of commodities, medicinal herbs, gemstones, and gold for silk thread flourished, Chinese art had little influence on the arts of Rome or lands in between.

By the ninth century CE, heavier items, such as Chinese porcelain, were traveling west along maritime trade routes. The Arab traveler Ibn Battutah (1304–1368 or 1369) remarked on the “green pots” shipped from south Chinese ports to the homes of affluent merchants on Africa’s east coast. Ibn Battutah’s description perfectly characterized the gray to yellow green ware known in later years in the West as celadon. Known simply as *qingci* (green ware) in China, this ancient ceramic was perfected in the third and fourth centuries CE. As the backbone of the Chinese porcelain industry, *qingci* was mass-produced in such huge numbers that Marco Polo (1254–1324) marveled over ordinary Chinese eating rice from *porcella* bowls—that is, dishes with the hard, lustrous surface of a cowrie shell (*porcella*). In Europe, celadon’s exquisite finish and elusive color promoted this fine ceramic from dinner table to a place of honor in the curio cabinet. Interestingly, these cherished imports were often modified to suit European taste in ways that would have shocked their Chinese makers. Thus, a bowl of “grene pурсselyne,” reportedly given by Archbishop Warham (c. 1504–1532) to New College, Oxford, was set in silver gilt, signifying its acceptance as an objet d’art fit for display with other ceramics of its kind that had also been privileged with similarly grandiose mounts. In Asia, fine ceramics for everyday use were the stock-in-trade of massive export programs; as many as forty thousand pieces of various sorts have been recovered from a single shipwreck. Although choice examples may have graced an imperial table as testimony to wealth and good taste, ceramics retained a functional character in Asia until modern times, when the collapse of the imperial dynasties cut off the flow of patronage that supported the manufacture of the finest wares.

Chinese Blue and White

At the time of Marco Polo’s fabled sojourn in Cathay (between 1275 and 1292) Kublai Khan’s domain



stretched from the Pacific to the Danube, from the Himalayas to the Siberian forests, encompassing within its boundaries Beijing, Samarqand, Karakorum, Moscow, all of Korea, parts of Southeast Asia, and Baghdad, the gem in the crown of Islam. This vast Mongol empire was one great trading zone where paper money (backed by precious metals and silk) facilitated the exchange of goods, none of which were of Mongol manufacture. It was during the reign of the Khans that a new kind of porcelain appeared, one that was destined to become the most successful invention in ceramic history—Chinese blue and white porcelain.

The cobalt used to paint the vibrant blue designs on the white porcelain ground was originally imported from Persia. It may be that Persian merchants, residing in the port cities of southern China, were the original market for this ware; the enormous size of some early blue and white platters points to clients accustomed to eating off large common plates. Regardless, the demand for blue and white porcelain soon spread throughout the world, spawning speculation about the secret of its manufacture. Augustus the Strong (1670–1733), the elector of Saxony and king of Poland, sponsored Johann Friedrich Böttger (1682–1719) in experiments to produce porcelain, efforts that led to the establishment of the works at Meis-

A common sight found by the sides of Chinese gates, the Chinese guardian dog is a symbol of protection.

sen in 1710. European manufacture of porcelain did not interrupt the flow from China and Japan. The trade continued throughout the eighteenth century, with more than a million pieces entering northern Europe in 1774 alone.

Chinoiserie

Painted designs on Chinese porcelain provided an indirect model for the “Anglo-Chinese” gardens that were the rage in England in the early eighteenth century. The small pictures on the porcelain items inspired actual European and American replicas; the pagoda erected in Kew Gardens, the arched fretwork bridge at Hampton Court (now destroyed, but known through an engraving by Canaletto), the fretwork arms of a Chippendale chair, and the fence designed by Thomas Jefferson for the University of Virginia campus are all examples. Views of merchant houses painted on export porcelains were like illustrated postcards providing a glimpse of Chinese interiors and their furnishings. These miniature views, occasionally buttressed by the reports of travelers to Asia, provided the underpinning for the style known as chinoiserie. The painter and designer Francois Boucher (1703–1770) was a master of that hybrid manner. Boucher’s romantic *Chinese Fishing Party* (1741) melds Asian-looking actors with an ethereal French setting perfectly attuned to the tastes of his patrons, Louis XV and the Marquise de Pompadour.

The term *chinoiserie* implies an exclusive interest in Chinese subjects, but that was not the case. Japanese themes were included in these rococo fantasies, reflecting the long-standing trade in Japanese goods. By 1639 the Dutch were established at Deshima in Nagasaki Harbor, exporting the Arita and Imari porcelain that was sometimes imitated in Dutch factories. Deshima remained the exclusive port of call for foreign trade and the only place where enterprising Japanese could gain knowledge of European art, science, and technology.

The arrival of Admiral Matthew Calbraith Perry (1794–1858) and his sail- and steam-powered ships in Shimoda Harbor in 1853, followed by the successful negotiation of the Kanagawa and Shimoda treaties guar-

anted trade between Japan and the United States. As a result of treaties like those, the world became one great trading zone connected by wind and steam, the telegraph, newspapers, and international expositions (really trade shows) advertising a nation's most prized products. The Asian exhibits included various kinds of porcelain, svelte lacquer boxes, refined metal work, wonderful fabrics, and in some instances replicas of teahouses, gardens, and even miniature villages that gave life to the paper images sold to be viewed with the newly invented stereopticon. The citizens of the world were getting to know one another and to share their finest products as never before.

Japonisme

Japanese woodblock prints were sometimes part of the trade show inventory. Though not valued as fine art in Japan, the colorful pictures of actors, courtesans, and landscapes filtering into Europe had great appeal for artists such as Claude Monet (1840–1926), who found in these prints both inspiration and confirmation of his



**A Japanese vessel
of satsuma ware.**

own efforts to forge a modern style. Monet covered his dining room wall with Japanese prints, built a Japanese garden with an arched wooden bridge, and posed his wife in a bright kimono against a background accented with Japanese fans. That picture, *La Japonaise: Madame Monet in Japanese Costume* (1886), was exhibited alongside works by Mary Cassatt (1844–1926) and Paul Gauguin (1848–1903). Other artists drew directly from print sources. Gauguin incorporated a sketch of wrestling figures copied from the *Manga* (Sketchbooks) of Hokusai (1760–1849) in his *Vision after the Sermon* (1888). Vincent van Gogh (1853–1890) made a close copy of “Evening Shower at Atake and the Great Bridge,” number fifty-two in the series *100 Views of Edo* (c. 1856–1858) by Hiroshige (1797–1858). *Nocturne in Black and Gold: The Falling Rocket* (1884–1887), by James McNeil Whistler (1834–1903), is indebted to Hiroshige's prints of the same subject.

The popularity of the print among these artists was not solely a matter of means, flat color, a lack of modeling or the choice of unusual points of view. Part of its appeal



**The Grand Palace
and the Temple of the
Emerald Buddha in
Old Bangkok City.**

A nineteenth-century Chinese portrait painter at work in his studio.

was on the social level. The treatment of low-life themes in Edo (present-day Tokyo) was in sympathy with depictions of the demimonde in Paris, such as those by Henri Toulouse-Lautrec (1864–1901). The exotic sexuality of the Japanese *ukiyo-e* (drawings of the “floating world”—a description of Edo’s pleasure quarters) prints found a match in the eroticized novels of Pierre Loti (1850–1923) and the opera *Madame Butterfly* (1904), by Puccini (1858–1924), and the fascination of the urban citizen of Edo with landscape was in harmony with the *plein air* (outdoor) movement in European painting.

Curiously, the earlier influence of Western art on these same Japanese print makers is less well publicized. The most famous of all Japanese prints, Hokusai’s “In the Trough of the Great Wave at Kanagawa” (first in the series *Thirty-Six Views of Mt. Fuji*, 1827) was derived from earlier studies that Hokusai called the *Great Wave in the Western Manner*. And both Hokusai and Hiroshige designed prints illustrating one-point perspective, a Western technique. East and West, artists were looking at one another’s work for inspiration and guidance.

The Influential Role of Museums

In the latter part of the nineteenth century, adventurous Westerners began to report directly from Asia. Lafcadio Hearn (1850–1904), fleeing Western materialism, published *Japan: An Attempt at Interpretation and Other Writings*. Harvard-educated Ernest Fenollosa (1853–1908) received a professorship in philosophy at Tokyo Imperial Normal School (precursor of Tokyo University), where he lectured (with little effect) on the value of Japanese art, which was depreciated in its homeland in the rush towards all things Western. In this climate of fevered modernization Fenollosa purchased treasures that became the core of the Japanese collections in the



Museum of Fine Arts in Boston. In 1912 Fenollosa published his influential *Epochs of Chinese and Japanese Art*. The public museum emerged as the ultimate market for works of art by the end of the nineteenth century and the beginning of the twentieth. In 1923 the financier Charles Lang Freer (1856–1919) established a self-named gallery of Asian art in Washington, the first art museum in the Smithsonian system. And in 1936 the Chinese government staged the first “blockbuster” exhibition of Chi-

nese art at Burlington House in London, giving Western audiences an opportunity to sample the full range of Chinese art.

The Influence of Asian Spiritual Systems

The collections of Asian art amassed in the great museums in Europe and North America encouraged the public to pick and choose between the various arts of different cultures. Mark Tobey (1890–1976) worked in the Seattle Art Museum and became interested in Chinese calligraphy, resulting in his “white writing,” exhibited in New York in 1944. Tobey lived for a brief period in a temple in the outskirts of Kyoto, Japan. Morris Graves (1910–2001), famous for his mystical “bird” paintings, visited East Asia several times between 1928 and 1930. Tobey and Graves both had an interest in Eastern religions, Tobey in Baha’i and Graves in Daoism and Zen Buddhism. Each would avow the influence of these spiritual systems on their works, though neither was imitating religious icons. What these artists sought was not just the form of Asian art but the essence of its spirit.

The master potter Bernard Leach (1887–1979) was on the same spiritual quest. Together with Shoji Hamada (1894–1978) Leach brought Japanese ceramic practices, especially raku techniques, into the studio arts tradition. The rough-hewn ordinariness of raku ware and its spontaneous expressionism was the perfect complement to the

intuitive experience essential to much action painting and compatible with the spiritual intent of painters like Tobey and Graves. With the interest in raku came the tea esthetic and an appreciation of Korean ceramics, celadon in particular, but also pieces displaying an accidental effect.

The influence of Asian art on Western painters that began with the Impressionists in Paris ended with artists like Tobey and Graves and the Abstract Expressionists, all of whom saw Asian art in the past tense. Van Gogh was copying thirty-year-old prints that were only available because they were devalued in Japan. The calligraphy admired by Tobey or the Zen-inspired painting that caught the attention of Roger Fry (1866–1934 CE) and Morris Graves belonged to centuries-old traditions. The raku techniques introduced by Leach have had the most enduring effect, yet even this tradition is being challenged by a younger generation of studio potters. The Japanese-style gardens that are re-created in parks around the world echo old forms and not the new designs of the present generation in Japan. Today, the ease of communication along the World Wide Web—the electronic counterpart to the Silk Roads—has internationalized local East Asian artistic traditions to the point that it is difficult to distinguish the art of one country from another. As Leach would have it, “All from West to furthest East are unitive and not dualistic” (Leach 1988, 9–10).

Robert J. Poor

See also China; Japanese Empire; Porcelain

Further Reading

- Carswell, J. (1985). *Blue and white: Chinese porcelain and its impact on the Western world*. Chicago: The David and Alfred Smart Gallery, University of Chicago.
- Imprey, O. (1977). *Chinoiserie: The impact of Oriental styles on Western art and decoration*. New York: Charles Scribner's Sons.
- Leach, B. (1988). *Drawings, verse and belief*. Rockport, ME: One World Publications.
- Phillips, J. G. (1956). *China trade porcelain*. Cambridge, MA: Harvard University Press.
- Westgesst, H. (1996). *Zen in the fifties: Interaction in art between East and West*. Zwolle, Netherlands: Waanders Uitgevers.
- Wichmann, S. (1985). *Japonisme: The Japanese influence on Western art in the 19th and 20th centuries*. New York: Park Lane (distributed by Crown).

Willets, W. (1958). *Chinese art*. New York: George Braziller.

Wood, F. (1996). *Did Marco Polo go to China?* Boulder, CO: Westview Press.

Wood, F. (2003). *The Silk Road: Two Thousand years in the heart of Asia*. Berkeley and Los Angeles: University of California Press.

Art—Europe

The history of European art is related to the idea of Europe itself, an idea that has been in transition during the twenty-first century. Although the ever-evolving boundaries of modern Europe were not delineated until the nineteenth century, well before that people may have considered themselves “European,” and there was important artistic activity on the European continent and the island land masses associated with it. The evolution of European art is characterized by the process of fusion and transmutation, much as the political entities of modern Europe developed from encounters between different migrating cultures. The proliferation of Christianity had an important impact on the development of a specifically European art and on its distinctiveness in world cultures, at least until the nineteenth century.

This essay will discuss five historical periods: art of the early Christian era (c. 200–400 CE); art of the migrating tribes (400–800 CE); art during the Middle Ages (500–1400 CE); art during the Renaissance and Baroque (1400–1800 CE); and art of the so-called modern world (1800–2000 CE). It should also be pointed out that although this discussion begins around the start of the common era and is inextricably bound up with the rise and dissemination of Christianity, important art was produced on the European continent during the Paleolithic and Neolithic periods (cave paintings and sculpture in the former, sculpture and architecture in the latter).

Early Christian Art

The most significant achievement of the Early Christian period was the forging of a new iconographic language that expressed the tenets of Christianity from a variety of Mediterranean antecedents: the Greco-Roman world,



The painting “Mignard’s Daughter” by French artist Pierre Mignard (1610–1695).

the Old Testament, and Egyptian art. Christians excelled at appropriation to communicate their message, and the visual tropes that were developed at that time persisted through the later periods of European art.

CATACOMB PAINTING AND EARLY CHRISTIAN ICONOGRAPHY

The first art that can be associated with Christianity and the vocabulary of Christian signs was created in the Roman catacombs around 270 CE, when Christianity was one among many cults within the Roman Empire. The catacombs were underground burial sites, used by many sects as well as by Christians; a network of chambers and compartments had been dug under Rome and particularly its outlying areas. Although they were not places of worship, their walls were often covered with imagery that marked the religious affiliation of the deceased.

The chamber devoted to Saints Peter and Marcellinus in the Catacomb of Priscilla (fourth century CE) provides a good example of how diverse sources were melded together to symbolize Christian resurrection. An image of the Good Shepherd, drawn from classical iconography, is

placed in the center of the ceiling. In a Christian context, this image was understood to represent Christ leading his flock to salvation. Images of salvation drawn from the Hebrew scriptures surround the central image, such as Jonah being spat out by the whale or Noah relaxing under a vine and fig tree after the flood. New Testament expressions of salvation through Christian sacraments such as the Baptism and the Eucharist (the Last Supper) flank the central image of the Good Shepherd in a similar configuration in the Catacomb of Callixtus (second and third centuries CE). An Egyptian influence is seen in one of the first depictions of the Virgin Mary and the Christ child, located in the chamber of the Velatio (veiled woman) in the Catacomb of Priscilla. Here a woman nurses her child next to a haloed male figure, most likely Balaam, who points to a star over her head, drawing upon Egyptian images of Isis suckling Horus.

CONSTANTINE, THE PEACE OF THE CHURCH, AND THE DIVISION OF THE EMPIRE

In 312, the Roman emperor Constantine is alleged to have dreamed on the night before the battle of the Milvian Bridge of an insignia emblazoned with the letters *Chi* and *Rho*, the first two letters of the word *Christ* in Greek, entwined. In his dream he saw the words *in hoc signo vinces* (in this sign you will win), and while carrying the sign of Christ into battle, he defeated his rival Maxentius. Thus began a series of enactments whereby Christianity went from a persecuted cult to a state religion in a period of ten years. Constantine was a pivotal figure. He came to power as a Roman emperor, became the first Christian emperor, and ultimately was the first Byzantine emperor, as well. The visual forms that were formulated during his reign had an important impact on the development of European art for the next 1,500 years.

When Christianity became the state religion of Rome, the power of the empire was placed behind the church, thus stimulating the construction of large-scale buildings. Classical structures were transformed to fulfill the needs of Christian worship, with two architectural forms becoming dominant. The longitudinal form, derived from the Roman basilica but revised to be oriented from east

I live and love in God's peculiar light. • MICHELANGELO (1475–1564)

to west along its vertical axis, became the format for the Eucharistic church, which was designed to hold masses of people: St. Peter's, St. John of the Lateran, and St. Paul Outside the Walls. The centralized form, derived from baths and tombs, became associated with baptisteries and martyria (building dedicated to and containing the relics of martyrs).

The power of the empire was also reflected in the developing iconography, particularly in the image of Christ. Whereas initially Christ had been conceived of as a Good Shepherd, his visual image subsequently became imbued with imperial connotations. The image of Christ as emperor first appears in pictorial imagery in Constantinian basilicas of the fourth century as the mosaic image in the apse of Santa Pudenziana (390 CE) where he is shown bearded and enthroned, surrounded by his apostles. Another use of imperial imagery can be seen in the nave of St. Paul outside the Walls (385 CE), where the wall surface at the juncture between nave and apse is treated like a triumphal arch (c. 450 CE), with Christ in an *imago clipeata* at its apex, surrounded by the evangelist symbols, the twenty-four elders of the apocalypse, and images of Saints Peter and Paul.

In 332 CE, to escape the disruption of intensifying tribal invasions, Constantine moved the seat of the empire to the ancient city of Byzantium on the Bosphorus, which resulted in the division of the Christian world into two empires, East and West. The Eastern empire remained continuous from Constantine's era until the sack of Constantinople by the Ottoman empire in 1456. Art forms became stabilized and persisted over those years as in a time capsule. The Western empire went through a decline that took centuries to reverse. Artistically there was a process of integration of diverse sources as Christianity moved from its Mediterranean base to outposts in Northern Europe.

Tribal Migration

The most significant cultural achievement of the age of migration was the development of a new visual language from the integration of Northern tribal stylistic motifs with the Mediterranean structures that had become iden-

tified with Christianity. Indigenous northern styles were based upon a nonrepresentational visual vocabulary and the decoration of portable objects of use. Often the status of its owner was shown by the size and complexity of the object, as seen in the so-called *Tara Brooch* (c. 725 CE). A large ring brooch, its every surface, both front and back, is divided into sections, teeming with complex, tightly entwined, boundary-pushing interlace. Even the slim vertical fastener is decorated, its finial a dragon's head with two bosses for its eyes.

The Book of Kells, a gospel manuscript probably written by monks on the island of Iona during the latter part of the eighth century CE and described in the twelfth century by Giraldus Cambrensis as "the work of angels," reveals a similar decorative concept applied to a Christian object. Each gospel is introduced by a richly decorated page in which the first words of the text are embedded in lavishly wrought decoration covering the entire surface. The *Chi-Rho* page (actually the beginning of the story of the birth of Christ in the gospel of Matthew) resembles a painted version of the Tara brooch, in which the large forms of the first Greek letters of Christ's name (*XPI*) have been divided into sections, crammed with interlace, and locked into the page's surface with more decorative motifs. This page contains a wonderful detail in its lower left-hand side, of two cats attacking two mice who are seizing upon a Eucharistic wafer, a small bit of realism.

The Book of Kells also incorporates classical elements. Each of the gospels is preceded by a schematic portrait of its author seated in an elaborately decorated arch, a form taken from the late Roman practice of preceding texts with portraits of their authors, and the manuscript contains early Northern attempts at showing narrative, as in the page depicting the arrest of Christ. Finally, this manuscript also reveals a fusion with Egyptian sources, probably related to the eremitic monastic tradition. The image of the Virgin holding the Christ child emphasizes the tender connection of the pair, as seen in images of Isis suckling Horus, rather than the rigidity of the hodegetria type in which the Virgin presents the child in a frontal pose ("shows the way") developed during the early Byzantine period.

Medieval Art, East and West

Two differing artistic traditions coexisted during the Middle Ages, corresponding to the division of the Roman empire into East and West. Although they developed separately, there were occasional points of contact between them and they both exerted influences on the art of the following period.

EASTERN

There is a major division in Byzantine art, into that produced before the period of iconoclasm (early Byzantine art) and that produced after (middle and late Byzantine art). The emperor Justinian (527–565 CE) viewed himself as a second Constantine, and his reign is referred to as the “Golden Age” of Byzantine Art. The court church of Justinian, the Hagia Sophia (537 CE, “Holy Wisdom”) in Constantinople (now Istanbul), designed by Anthemius of Tralles and Isidorus of Miletus is a brilliant merging of centralized and longitudinal architectural forms, and it embodies the aesthetics of this first period of Byzantine art. A vast, undulating space, the interior was covered with gold mosaics and multicolored marble and, according to Justinian’s court historian, Procopius, seemed to radiate its own light. It was surmounted by an engineering marvel, a huge dome on pendentives, punctuated by a ring of small windows, so it seemed to hover above the central space, in Procopius’s words, “as if suspended from the heavens by a golden chain.”

The period of iconoclasm (726–843 CE) involved a theological and cultural dispute concerning the nature of images, their veneration, and their relation to the godhead. Its resolution in the mid-ninth century resulted in a formula that remained operational until the mid-fifteenth century, when Constantinople was conquered by Islamic forces. The middle Byzantine church was built around a domed, centralized plan and was decorated with very restricted images arranged hierarchically. The highest areas were limited to images of Christ; the Virgin and Child could be depicted in the apsidal area; the lower regions were limited to images relating to the liturgical

feast days. This approach to decoration was prevalent not only in Constantinople, but also in Greece, the Holy Land, and the Balkans.

During the latter period of Byzantine art, the image of the Virgin and Child underwent an important transformation. Although icons that used the older form, the “Hodgetria,” in which the Virgin points to Christ as “the way” to salvation continued to be produced, the image of the “Madonna of Tenderness” was also developed. These latter expressed the intense emotional relationship between mother and child and exerted an important influence on images that were later developed during the Italian Renaissance.

During the Middle Ages the Eastern and Western empires were parallel universes, for the most part separate, but with numerous points of contact and interpenetrations. For example, an Ottonian (Germanic) king married a Byzantine princess in the late tenth century, which resulted in the increased use of Byzantine artistic styles and motifs. After 1096, Crusaders to the Holy Land encountered many examples of Byzantine artistic production, which they brought back to the West. (Unfortunately, they also conquered and occupied Constantinople for just over fifty years [1204–61 CE].) The city of Venice was a crossroads between the West and the East, as seen in the Church of San Marco (1071 CE).

WESTERN

Art and learning in northern Europe from the ninth through the twelfth centuries were practiced in monastic centers that were often supported by temporal rulers. Beginning with the reign of Charlemagne, who had himself declared Holy Roman Emperor in the tradition of Constantine and Justinian, there were several so-called *Renaissances*, periods where the body of knowledge and the artistic styles of the classical world were consciously reinterpreted as models for contemporary practice.

The major achievement of the Western Middle Ages was the development of large architectural forms, the Romanesque pilgrimage church and the Gothic cathedral. Writing in the middle of the eleventh century, the

**“Marriage of the Virgin” by
Italian early Renaissance painter
Pietro Perugino (1448–1523).**

monk Raoul Glaber described how the world began to be covered with a “white mantle of churches” after the year 1000, when contrary to popular expectation, it had not been destroyed during the second coming. Whether or not for millennial reasons, during the eleventh century, Western Europeans began to consolidate and expand their knowledge of construction methods. By the thirteenth century, the Western cathedral had been developed, primarily in France but also in England, Germany, and Italy.

The cathedral dedicated to the Virgin Mary at Chartres provides an excellent example of how cathedrals (literally, bishops’ seats) were encyclopedic embodiments of human knowledge. In its architecture, Chartres illustrates the most important advances of the period, how to build a tall building with a stone vault, for which the flying buttress was developed as a means of transferring the load from the interior to the exterior of the building through the logical application of the bay system of construction. This method allowed the building to be suffused with light, whose significance was metaphorical, the Divine Light modulated on earth, emphasized by stained-glass windows that depict both sacred and secular subjects.

Each of three portals, marking the passage from secular to sacred space, is given special treatment through coordinated sculptural programs that communicate a message of salvation through Christ while at the same time expressing the unity of human history and knowledge. Chartres was a center of learning, and such classical concepts as the *trivium* and *quadrivium* are also expressed on its surface, as is the passage of human time through the depiction of the signs of the zodiac and the labors of the



months. Thus the building reflects the cosmos, the establishment of the Heavenly City of Jerusalem on earth.

Renaissance and Baroque Art

Although there had been several smaller rebirths of classical culture during the Middle Ages, the ultimate one took place during the Renaissance, when learned people made a concerted attempt to copy and reinterpret Greco-Roman texts and images with greater authenticity. This movement was self-defining and it was centered in Italy, although it was experienced in other geographical locales. There were two important artistic results of the Renaissance: an emphasis on the human rather than on



“Anatomical Lecture by Doctor Tulp” by the Dutch Baroque painter Rembrandt (1606–1669).

the divine, and the ability to make illusionistic depictions of the real world. Whereas in the Middle Ages the church was the major patron, during the Renaissance, in concert with the emphasis on the individual, we see the rise of the wealthy, aristocratic patron.

There is a substantial overlap between the Late Gothic and the Renaissance periods: The tendency to make images that reflected actual human interactions can be seen as early as the twelfth and thirteenth centuries. Nonetheless, the Renaissance is characterized by a conceptual shift, whereby, following the Roman architect Vitruvius, “man” became the measure of all things, although the cosmos was still given divine authorship. The painting by Masaccio (1401–c. 1427) of the *Expulsion from Paradise* for the Brancacci chapel (Florence, 1426 CE) provides a good example of this change in consciousness. Here, the first humans are shown in a state of utter desolation and abjection—Adam covers his face, Eve lets out

a wail—as they are forced to walk the face of the earth in punishment for their disobedience. During the next hundred years the tendency to create accurate and convincing images of the human body became progressively more important; by the early sixteenth century Michelangelo (1475–1564) described his process of sculpting as “liberating” the human form that was “hiding” in the stone.

Likewise, during the fifteenth century artists sought to create pictorial illusions, conceiving the picture surface as a “window,” a continuation of actual space. The ability to create illusionistic space was dependent on the mathematical discovery, by Brunelleschi (1377–1446) and Alberti (1404–1472), of single-point perspective, a method of accurately representing on a two-dimensional surface the spatial relationships of human vision, characterized by the convergence of parallel lines at a single vanishing point on the horizon. Although for many years artists had

used an “empirical” perspective in which spatial relationships were approximated, mathematical single-point perspective was first employed in the early fifteenth century by artists such as Masaccio in his *Trinità* fresco (Florence, c. 1425).

Massaccio’s northern contemporaries, such as Jan van Eyck (1395–1441), were less interested in mathematical construction; however, they excelled in using atmospheric perspective (the progressive graying and loss of detail at the horizon) to communicate the sense of deep space. By the next century both methods had become standard painting procedure. Works centered around the papal chambers in the Vatican, such as Michelangelo’s paintings on the Sistine Chapel ceiling (1510) or Raphael’s on the walls of the Stanza della Signatura (1511), feature expansive vistas created through spatial illusionism.

The emphasis on verisimilitude that developed during the Renaissance remained a dominant artistic feature for the next four hundred years. During the Baroque period Caravaggio (1573–1610) used stark contrasts of light and dark to create intensely dramatic works, and Rembrandt (1606–1669) explored profound psychological states. Pictorial illusionism has become so normalized and naturalized that, even now, it is difficult to realize that those artistic criteria are relatively unique in human history, and that they are not the sole criteria of artistic skill and sophistication. Furthermore, a hierarchy of value was established in the post-Renaissance–Western “high art” tradition, in which subjects drawn from history, myth, or the Bible were considered to be more “important” than others, such as landscapes, everyday scenes (“genre paintings”), or still lives.

The “Modern World”

During the nineteenth century artists became interested in painting the actual without needing to imbue it with ulterior meaning. This lack of interest in ulterior meaning continued into the early twentieth century, when many artists also became interested in showing multiple perspectives, and culminated in an art that needed no external reference at all.

THE NINETEENTH CENTURY

Painting for its own sake was a goal of Impressionism, which began in France around 1870 and persisted for about twenty years. Like earlier nineteenth-century painters, the Impressionists were interested in depicting the specifics of the real world; however, they went further in that they attempted to make images that appeared to catch the transitory nature of perception.

The Impressionists took two basic approaches in their desire to capture the fleeting moment. The first is exemplified in the work of Claude Monet (1840–1926), who was particularly interested in depicting the effects of light. In his works *Impression: Sunrise* (1872), which gave its name to the movement when a journalist belittled its seeming lack of polish, or *Sailboats at Argenteuil* (1873), he uses a broken brushstroke and patchily applied color to express the shimmer of light refracted in water. In the 1880s he began to paint in series, to observe the same scene at different times of day under different weather conditions, as in his many images of grain (or hay) stacks under the differing effects of sunrise, sunset, full sun, haze, rain, and snow. In the series depicting the water lilies in his garden at Giverny, on which he continued to work until his death in 1926, the desire to capture the ephemeral nature of perceived light is carried to its extreme as all referential objects dissolve into fragments of color.

The other approach, practiced by more artists, sought to depict the vagaries of “modern life,” particularly the life of the modern city with its hustle and bustle of strangers in streets, cafes, and dance halls. Camille Pissarro (1830–1903) painted the boulevards of Paris seen from above, the traffic and people indicated by specks of paint. Edgar Degas (1834–1917) and Auguste Renoir (1841–1919) painted dancers caught in motion and people in cafes pausing in mid-drink. This way of seeing was particularly gendered, with women artists such as Mary Cassatt (1845–1926) and Berthe Morisot (1841–1895) concentrating on the interactions between women and children in their homes. Painters were influenced by the invention of photography in the first half of the nineteenth century, as in Degas’s image *Place de la Concorde: Vicomte Lepic*

Art is right reason in the doing of work. Three things are necessary for the salvation of man: to know what he ought to believe; to know what he ought to desire; and to know what he ought to do. • ST. THOMAS AQUINAS (1225–1274)

(1876), which uses photographic compositional devices such as cropping; Degas and others were also aware of motion studies by photographers such as Eadward Muybridge.

Japanese prints exerted another important influence on painters in both content and structure. With the opening up of Japan to the West in 1859, Western artists were introduced to the *ukiyo-e* print, which presented images of the “floating world” of ephemeral, daily human actions. Many painters sought to emulate the pictorial structure of Japanese woodcuts, which consisted of flattened planes and oblique entrances into the compositional space. Mary Cassatt was especially successful at capturing the effects of *japonisme* in her series of colored etchings achieved in the early 1890s, showing women going about their daily tasks, such as writing letters and bathing their children.

EARLY TWENTIETH CENTURY ART

During the early twentieth century artists challenged the spatial system that had been devised during the Renaissance, seeking alternative approaches to representing three-dimensional space on a two-dimensional surface. The interest in showing multiple perspectives can be related to scientific developments of the early twentieth century that emphasized the reality of phenomena not readily apparent to the naked eye.

Cubist artists wanted to create a picture surface that reflected the active experience of seeing, where the eye is not static but rather composes an image by integrating myriad simultaneously perceived points of view. (“Cubism” was a pejorative term given to the movement by critics who found it puzzling and disturbing.) Pablo Picasso (1881–1973), Georges Bracque (1882–1063), and Juan Gris (1887–1927) were the first to develop works that used this technique in which rather than a recognizable image of a guitar player, viewers are confronted with “faceting,” fragments of the guitar’s strings, the player’s fingers, and smoke from his cigarette, which they need to piece together in order to read the image. The first phase, known as “analytic cubism,” is characterized by a greater use of faceting than in “synthetic”

cubism, a slightly later phase, where the multiplicity of the facets is resolved into overlapping planes, as in Picasso’s work *Three Musicians* (1921).

The development of cubism was important in that it integrated pictorial structure from non-European cultures with European modernism. In Picasso’s work *Les Femmes d’Alger (O. J. R. M.)* (1906), for example, the face of the figure on the right looks very much like an African mask, with its abstracted features and multiple facets. By the early twentieth century, African art was being exhibited in European ethnological museums, where many artists responded to the abstract pictorial techniques of masks and other sculptures, as well as to their aura of mystery. Ironically, the structures were appropriated without a full understanding of the cultures from which they derived, nor of the works’ meanings within those cultures.

The way of seeing developed in cubism was influential in numerous other twentieth-century artistic movement. Artists in both Italy and Russia used related techniques to communicate the experience of physical motion. Umberto Boccioni (1882–1916) and the Futurists sought to communicate the experience of speed. Nathalia Goncharova’s (1881–1962) depiction of a bicyclist uses faceting to show the motion of the bicycle wheels and also the experience of the bicyclist as he sees the visual data of the world go by. Later, Goncharova and others attempted to depict moving rays of light, and other artists, such as Sonia Delaunay (1885–1979) and Robert Delaunay (1885–1941), also used faceting to communicate the simultaneity of vision, to analyze light and its motion as well as the motion of the human eye. These latter artists began to make art that seemed increasingly more abstract, dependent less on perceived reality than on pictorial reality. Based on “pure plastic form” (the tensions that exist between colors and shapes and their placement on a pictorial surface), the work of art was conceived as sufficient to itself, needing no external reference, an extreme effect of the nineteenth-century turn away from content.

An interesting, and seemingly contradictory, extension of the development of artistic abstraction was the renewed desire to blur the boundaries between art and

life. Many artists whose art was based on purely formal tensions sought to apply the same principles to the design of everyday objects. In Russia around the time of the Revolution (1917) artists such as Liubov Popova (1889–1924) wanted to make a “new art for a new age,” an art that was based on principles of abstraction but that had application in design—fabrics, dishes, book covers, and stage sets. Sonia Delaunay designed stage sets, fabrics, and even the furnishing of automobiles; she said, “One day I make a painting, the next I make a dress—there’s no difference.” An entire school dedicated to the universal application of design principles, the Bauhaus, was founded in Germany during the 1920s.

In many world cultures art is an intrinsic form of lived experiences, whereas in European art, high art and the daily environment became bifurcated. Unfortunately, despite the aforementioned attempts, during the remainder of the twentieth century, they only became more separated, and in the contemporary world there seems to be an increasingly unbridgeable gap between artists and their audience.

Mara R. Witzling

See also Eastern Europe; Europe; Inner Eurasia; Renaissance; Western Civilization

Further Reading

- Bowlit, J. E., & Drutt, M., Eds. (2003). *Amazons of the avant-garde: Alexandra Exter, Natalia Goncharova, Liubov Popova, Olga Rozanova, Varvara Stepanova, and Nadezhda Udaltsova*. New York: Harry F. Abrams.
- Clark, T. J. (1984). *The painting of modern life: Paris in the art of Manet and his followers*. Princeton, NJ: Princeton University Press.
- Edgerton, S. (1976). *The Renaissance rediscovery of linear perspective*. New York: Harper and Row.
- Freedberg, S. J. (1983). *Painting in Italy, 1500–1600, pelican history of art*. (2nd ed.). Baltimore: Penguin.
- Grabar, A. (1967). *The beginnings of Christian art, 200–395* (S. Gilbert & J. Emmons, Trans.). London: Thames and Hudson.
- Grabar, A. (1968). *Christian iconography: A study of its origins*. Princeton, NJ: Princeton University Press.
- Gray, C. (1986). *The Russian experiment in art: 1863–1922* (Rev. ed.). London: Thames and Hudson.
- Harrison, C., Frascina, F., & Perry, G. (1993). *Primitivism, cubism, abstraction: The early twentieth century*. New Haven: Yale University Press.
- Hart, F. (1994). *A history of Italian Renaissance painting* (4th rev. ed.). New York: Thames and Hudson.
- Henderson, G. (1987). *From Durrow to Kells: The insular gospel books, 650–800*. London: Thames and Hudson.
- Jantzen, H. (1962). *High Gothic: The classical cathedral at Chartres*. Princeton, NJ: Princeton University Press.
- Krautheimer, R. (1968). *Studies in early Christian, Medieval, and Renaissance art*. New York: New York University Press.
- Krautheimer, R. (1986). *Early Christian and Byzantine architecture (Pelican history of art)* (4th ed.). Baltimore: Penguin.
- Laing, L. (1992). *Art of the Celts*. New York: Thames and Hudson.
- Mathews, T. F. (1999). *The clash of gods: A reinterpretation of Early Christian art*. Princeton: Princeton University Press.
- Panofsky, E. (1969). *Renaissance and renaissances in western art*. New York: Harper and Row.
- Pollock, G. (1988). *Vision and difference: Femininity, feminism, and histories of art*. New York: Methuen.
- Rosenblum, R. (1984). *Cubism and twentieth century art* (Rev. ed.). New York: Harry N. Abrams.
- von Simpson, O. G. (1988). *The Gothic cathedral: Origins of Gothic architecture and the Medieval concept of order* (3rd ed.). Princeton, NJ: Princeton University Press.
- de Sanato Swinton, E. (Ed.). (1996). *Women of the pleasure quarter: Japanese paintings and prints of the Floating World*. New York: Hudson Hills Press and the Worcester Art Museum.
- Snyder, J. (1989). *Medieval art: Painting, sculpture, architecture, 4th–14th century*. New York: Harry N. Abrams.
- Tucker, P. H. (1995). *Claude Monet: Life and art*. New Haven, CT: Yale University Press.

Art—Native North America

Artistic material productions of aboriginal persons and their ancestors who inhabited lands from the Rio Grande River to the Arctic Circle and the Atlantic to the Pacific coasts encompass a diverse array of media: from petroglyphs or “rock art” (for example, Peterborough petroglyphs, Ontario, Canada) to contemporary photographs (for example, the work of Victor Masayesva Jr., Hopi, or Jolene Rickard, Tuscarora); from a horse effigy dance stick (anonymous Lakota artist, 1880s) or a visored hat of wood, feathers, and carved ivory (anonymous Yup’ik artist, early nineteenth century) to installation and performance art (for instance, the work of Rebecca Belmore, Ojibwa, or James Luna, Luiseño). The wide spatial, temporal, social, cultural, and historical span of this art attests to a vitality and conceptual continuity, from



4500 BCE Lower Mississippi Valley mound architecture to the 2004 newly opened National Museum of the American Indian, a native-designed structure housing the world's largest collection of this art.

In the twenty-first century, art produced by the indigenous inhabitants of North America is also called "First American art." The rubric attests that this art, made by original and descendant inhabitants of these lands and not by occupants who arrived through the waves of colonial encounters that began in the sixteenth century, is primary among the arts of the United States and Canada (where it is called "First Nations art"). Even in its great diversity the art typically incorporates and conveys a relationship to place and community, an orientation central to its expressive intent that often implies a deliberate assertion of identity or intimacy. With contributions from more than five hundred cultural groups and many more prior to Spanish colonization, the category is by no means cohesive, and there is a divide between the critical reception of works wrought in traditional (that is, historic and precontact) materials and contemporary media in modern times. The range and significance of these varied, vibrant productions continue to impact artistic developments and world history.

History and Historiography of First American Art

Resolving a debate of long duration (whether or not art work produced by the indigenous peoples of North America can be called art), the designation "First American art" signals the value of their work. Europeans (especially Spanish, English, Dutch, French, and Russians) began acquiring "curiosities" made by the native inhabitants of the "New World" upon arrival on its foreign soil, and many of these objects still exist in the European museums (for example, in Berlin, Helsinki, Leningrad, London, and Paris). In the nineteenth century objects made by American Indians became the focus of systematic U.S. collecting and formed the core of most urban museum collections: Indian imagery provided a potent focus of the young nation state until France's gift of "The Statue of Liberty" in 1883. Indigenous peoples often

exchanged valued objects with Europeans, symbolically solidifying international relations and sometimes representing them (for example, Mohawk "Guswenta" or Two-Row wampum, seventeenth century). The late eighteenth-century Mandan or Lakota pictographic bison robe attributed to the collection made by the Lewis and Clark Expedition (1804–1806) is iconic in Native American art history; it provides an early example of Plains biographical art and serves as a symbol of the diplomacy and political relations that helped form the United States.

Yet only in the late twentieth century did Native American art become a recognized field with the full complement of institutional networks including academic specialization, since in the Western art tradition, work must be inscribed into a canon that assesses its quality and defines its criteria. Controversy over classification centered on how to appreciate "traditional" work that often responded to an altered social landscape by incorporating European materials and designs (such as the flourishing "souvenirs" of Native American art from the Northeast in the eighteenth and nineteenth centuries, or postreservation Plains beadwork). There was also controversy over how to distinguish between an ethnological artifact and an aesthetic object, natural history and art history paradigms. Not until the mid-twentieth century did a concerted articulation of aesthetic value for these objects emerge in concert with an increasing number of named artists and private collectors; an expansive market, wide museum exhibition, and art historical surveys characterized the last quarter of that century. The question of "primitivism" critically informed collecting in the nineteenth and twentieth centuries and was central to Western, in particular American, ideas about the aesthetic value of indigenous objects.

Albrecht Durer's observations of Native American objects in Brussels (1520) marks a historical moment in the European appreciation of the potential value of objects from the Americas; exposure increased as these objects were housed in national museums, which began in the eighteenth century. Representations of Native Americans also began to pervade the wider visual environment beginning in the sixteenth century, sometimes as



illustrative material accompanying traveling exhibitions of native peoples of the Americas in Europe. These representations became more widespread by the nineteenth century, when Indians became pictorial subjects in their own right (that is, in the paintings of George Catlin) or were portrayed as “natural” elements within other genres like landscape painting (for example, in the work of Albert Bierstadt and George Caleb Bingham). The cultural evolutionism of nineteenth-century theorists such as Lewis Henry Morgan provided the stimulus for large-scale collecting in America.

Ancient ruins in the Southwest (from sites now differentiated as the precontact cultures of the Anasazi (700–1400 CE), Hohokam (550–1400 CE), and Mogollon (200–1150 CE) with their painted murals, decoratively elaborated pottery, worked shell and stone, and early textiles tangibly evinced a technologically advanced “primitive” society perceived as a nascent civilization. The material remains of other ancient peoples, including the Adena (1100 BCE–200 CE), Hopewell (100 BCE–500 CE), and Mississippian cultures (extensive mound construction in 1000 CE) in the east and central United States together with Norton Tradition, Old Bering Sea, Dorset, and Thule cultures in the Canadian Arctic (spanning the period 500 BCE–1000 CE), provided evidence of America’s antiquity, and are today also appreciated as its aesthetic heritage.

Emanating from a natural history paradigm, the results of nineteenth-century archaeological and ethnological exploration were displayed in museums as “remnants of a waning race” organized by the culture-area approach, a classification of peoples by geographic and environmental criteria that still informs even art museum exhibitions. In those displays and contemporary descriptions, Pueblo ruins were likened to European prototypes as an “ancient Pompeii,” “Greek theatre,” or “Roman forum” (for example, William H. Jackson’s *Reconstruction of Pueblo Bonito, Chaco Canyon*). In the twentieth century Pueblo architecture influenced such diverse architects as Mary Colter, Vincent Scully, and Frank Lloyd Wright in developing specifically American forms. World fairs and industrial expositions were also important venues for the represen-

tation of America’s native peoples and their arts (although they were pictured as technological inferiors), notably the U.S. Centennial Exhibition (Philadelphia, 1876) and the World’s Pre-Columbian Exhibition (Chicago, 1893).

Euro-American intellectuals gained access to native peoples not only through their visual and textual representations, but also through intimate association with them. Aby Warburg, a central figure in modern art history specializing in the Italian Renaissance, was impressed by the religious practices of the Hopi Indians he visited and photographed, and from whom he collected, in the 1890s, carved and painted wooden katchinas and dance wands. Warburg considered his encounter a “journey to the origins of [human] imagery” and believed it was responsible for his concern with essences. For other Euro-American collectors, too, ritual objects have been particularly desirable (despite the consternation of the natives to whom they remain living beings), and Western European fine artists have continued to use non-Western images and objects to explore philosophical ideas and to challenge and subvert their own cultural conventions.

The aesthetic concern with Primitivism, a handmaiden of Modernism in which Native American art figured importantly, was prominent from the 1890s through World War II; its influence is still felt in current non-native representations of Native American art. The Aesthetic and Arts and Crafts Movements also stimulated a wider interest in—and the collection of—Native American objects in the late nineteenth and early twentieth centuries.

Beginning in the twentieth century, studies of Native American art (notably the elaborate carvings and richly costumed performances of the Northwest Coast’s stratified societies in the seminal work of anthropologist Franz Boas and his students) helped to turn academic attention away from evolutionary concerns to the formal properties of objects and their cultural contexts. In fashioning a particularly American fine-art tradition (notably Abstract Expressionism), New York avant-garde artists, chief among them Jackson Pollack and Barnett Newman, drew on Native American art between the two world wars and rejected European academic traditions. By espousing a universal concept of art in which visual qualities were

Indeed, there is freedom in the capitalist countries, but for whom? Of course not for the working people, who are forced to hire themselves out to the capitalists on

valued independent of historical and cultural specificity, these artists (and critics such as Clement Greenberg) demonstrated the value of native cultures to a modern American heritage on the eve of global conflict at mid-century. Canada and Australia, sister postcolonial nation states, have also utilized the aesthetic value of indigenous productions in their national identities.

The Museum of Modern Art's 1941 exhibit "Indian Art of the United States" and especially the later "'Primitivism' in Twentieth Century Art: Affinity of the Tribal and the Modern" (1984) were watershed events in the representation and classification of Native American objects, provoking academic debate that has lasted into the twenty-first century. In the twentieth century, American museums were distinguished from their European counterparts by their emphasis on modern or contemporary and primitive art over classical forms, with Native American art figuring prominently in several national and international traveling exhibitions (especially the one that commemorated the U.S. Bicentennial). In Europe prior to World War II, the surrealists favored Native American art as a way of subverting established canons and establishing new syntheses of perception and representation in opposition to modernist trends. This intention is still seen in the work of British sculptor Eduardo Paolozzi.

In the Present: Modes and Materialities of Meaning

American representations of Native American art have largely maintained early twentieth-century anthropology's culture-area approach to "traditional" art (work derived from historic and precontact forms first assessed erroneously to be without Euro-American influence). Many of these forms, such as Pueblo pottery or Northwest Coast carving, continue to flourish today, some having undergone revivals through stimulation by traders, dealers, and native artists and often using museum collections as prototypes. The Hopi-Tewa potter Nampeyo, active from the 1880s to her death in 1942, was the first Indian artist recognized by name in the art world in her lifetime. Her descendants, including Dextra Quotskuyva and many others, continue to make distinctive hand-

coiled and ground-fired pottery of local materials interpreted in new ways. Robert Davidson, Haida, works to expand the carving tradition recognized in the nineteenth century and practiced by his forebear Tahaygen (Charles Edenshaw).

Most practitioners of traditional native arts before the twentieth century remain anonymous, but another notable exception is the Washoe artist Dat So La Lee (Louisa Keyser) who died in 1925 yet gave name and face to the otherwise perceived "utilitarian" and hence derided aesthetic practice of basketry. Until very recently, these traditional art forms and others (for example, Navajo weaving) continued to be represented by non-natives as objects and practices of a presumed "past" way of life, not the aesthetic expression of surviving and thriving contemporary peoples who are giving continuing meaning to their lives. New forms have arisen from these precursors, such as haute couture clothing utilizing Northwest Coast crest art (Dorothy Grant and Robert Davidson, Haida) and the fine-art tapestries of Ramona Sakiestewa, Hopi.

The traditional Native American objects first recognized as "art" were those whose attributes could be likened to specific Western fine arts (painting, drawing, architecture, and sculpture). Unlike native artists, who did not distinguish between "art" and "craft," for Western collectors in the late nineteenth century aesthetic value became the preeminent criterion of quality. Objects skillfully made but useful in everyday life were judged "craft" or "applied art."

Difficulty or a lack of interest in identifying the maker, combined with the problem of determining a maker's reputation for quality work, contributed to anonymity. Due to the frequently remote locations of origin, the fact that objects were often traded among indigenous groups and European merchants before arriving in private or public institutions, and the social nature of production in many traditional arts, individual makers and even tribal attributions could not always be made. Further, until the twentieth century, as a result of forced assimilation policies and compulsory off-reservation education, linguistic differences also separated objects from their original con-

any conditions just to avoid finding themselves in the ranks of the huge army of people who are “free from work.” • NIKITA S. KHRUSHCHEV (1894–1971)

texts and meanings in non-native eyes. Hence, the recognition of individual artists is an important twentieth-century development because it contributes to the value of the work in the art world. Yet many unnamed native artists still produce a vast array of aesthetic material without such recognition.

Training in contemporary media and studio art for native persons was first undertaken in Santa Fe’s School of Indian Art, founded in the interwar years; it became the Institute of American Indian Arts in 1962 (for instance, Pablita Velarde, Santa Clara Pueblo; Allan Houser, Chiricahua Apache; Fritz Scholder, Luiseño). Formal training now occurs in departments at major universities and art schools across the United States and Canada, launching a new generation of artists eager to articulate the significance of their art. These artists typically work in contemporary or nontraditional media but often combine elements of both in provocative works that challenge the boundaries of conventional representations of traditional work as well as the stereotypes and romanticism reproduced in them (for instance, Jane Ash Poitras, Cree/Chipewyan). In 1995, Gerald McMaster, Plains Cree, curated an exhibition of First Nations Canadian artists at the prestigious Venice Biennale.

Recent scholarship in both anthropology and art history, by non-natives and natives alike, has begun to break the steel-like frame of the criteria used to evaluate both “traditional” and “contemporary” media by examining the Western historical canon and writing in new ways about native arts. Studies have examined the historical and cultural factors that contribute to canonical structure, revealing that in the dominant canon of traditional Native American art the aesthetic is limited by the technical or material, fusing nineteenth-century anthropological and art historical concerns with “the primitive.”

New work also explores the cultural significance of media (for instance, clay, grasses, hide, or wood) from practitioners’ perspectives and the role of language and storytelling as “indigenous national histories” in constructing not only the object’s value but also the activity or process of making art. Native voices have been reclaimed and given prominence in a new articulation of

value, as the enumeration of seven principles of beauty in First American art at the National Museum of the American Indian attests. Contemporary Native North American artists, schooled in Western thought and the practice of art as well as in their own historical traditions, challenge universalist assumptions with the necessity to impute aesthetic value devoid of contextual considerations and the emphasis on the “origins” of human visual imagery to native work.

Manipulating a variety of media, including that of their ancestors, these artists challenge the very basis of aesthetic appreciation in the Western fine-art world. Their art, together with their articulation of its meaning, is now being inscribed into the discourse. It asserts that visual apprehension needn’t be primary in assessing aesthetic quality. This new political context, in which aboriginal producers have entered the world’s stage with the authority to define themselves and their work, marks a new moment in both the philosophy and the history of art. Gender is an integral dimension of this transformation, since native women have long been recognized as artists and creators of material forms that embody and help to reproduce local systems of knowledge.

In this global environment Native North American, First Nations, or First American art reveals how hybrid forms based on the knowledge of indigenous contexts in relation to a wider world actively realize beauty and meaning in rich and varied ways. This achievement may yet be the greatest influence of this art in world history.

Lea McChesney

See also Native American Religions

Further Reading

- Berlo, J. C. (Ed.). (1992). *The early years of Native American art history: The politics of scholarship and collecting*. Seattle: University of Washington Press and Vancouver: UBC Press.
- Berlo, J. C., & Phillips, R. B. (1998). *Native North American art*. Oxford, UK: Oxford University Press.
- Bernstein, B., & McMaster, G. (Eds.). (2003). *First American art: The Charles and Valerie Diker collection of American Indian art*. Washington, DC and New York: Smithsonian Institution/National Museum of the American Indian.
- Boas, F. (1955). *Primitive art*. New York: Dover Publications.

- Brasser, T. J. (1976). *Bo'jou, Neejee! Profiles of Canadian Indian art*. Ottawa, Canada: National Museum of Man.
- Breeze, C. (1990). *Pueblo deco*. New York: Rizzoli International Publications.
- Brody, J. J. (1977). *Indian painters and white patrons*. Albuquerque: University of New Mexico Press.
- Coe, R. T. (1977). *Sacred circles: Two thousand years of North American Indian art*. Kansas City, KS: Nelson Gallery of Art and Atkins Museum of Fine Arts.
- Coe, R. T. (1986). *Lost and found traditions: Native American Art, 1965–1985*. Seattle: University of Washington Press.
- Coe, R. T. (2003). *The responsive eye: Ralph T. Coe and the collecting of American Indian art*. New York: The Metropolitan Museum and New Haven: Yale University Press.
- Connelly, F. S. (1995). *The sleep of reason: Primitivism in modern European art and aesthetics, 1725–1907*. University Park, PA: Pennsylvania State University Press.
- Douglas, F. H., & D'Harnoncourt, R. (1941). *Indian art in the United States*. New York: Museum of Modern Art.
- Fane, D., Jacknis, I., & Breen, L. M. (1991). *Objects of myth and memory: American Indian art at the Brooklyn Museum*. New York: The Brooklyn Museum (in association with the University of Washington Press).
- Feder, N. (1971). *American Indian art*. New York: Harry N. Abrams.
- Feest, C. F. (1984). *From North America. "Primitivism" in twentieth century art: Affinity of the tribal and the modern*. I, 84–97 (W. Rubin, Ed.). Boston: Little, Brown.
- Feest, C. (1980). *Native arts of North America*. Oxford, UK: Oxford University Press.
- Flam, J., & Deutch, M. (Eds.). (2003). *Primitivism and twentieth-century art: A documentary history*. Berkeley: University of California Press.
- Gritton, J. L. (2000). *The institute of American Indian arts: Modernism and U.S. Indian policy*. Albuquerque: University of New Mexico Press.
- Guidi, B. C., & Mann, N. (Eds.). (1998). *Photographs at the frontier: Aby Warburg in America 1895–1896*. London: Merrell Holberton Publishers.
- Haberland, W. (1965). *The art of North America*. New York: Crown Publishers.
- Jonaitis, A. (Ed.). (1995). *A wealth of thought: Franz Boas on Native American art*. Seattle: University of Washington Press.
- Jonaitis, A. (1991). *Chieftly feasts: The enduring Kwakiutl potlatch*. Seattle: University of Washington Press.
- Leuthold, S. (1998). *Indigenous aesthetics: Native art, media, identity*. Austin: University of Texas Press.
- Lippard, L. R. (1992). *Partial recall: Photographs of Native North Americans*. New York: The New Press.
- McChesney, L. S. (2003). *The American Indian art world and the (re-)production of the primitive: Hopi pottery and potters*. Ann Arbor, MI: University Microfilms.
- McLaughlin, C. 2003. *Arts of diplomacy: Lewis and Clark's Indian collection*. Cambridge, MA: Peabody Museum, Harvard, and Seattle, WA: University of Washington Press.
- Maurer, E. M. (1977). *The Native American heritage: A survey of North American Indian art*. Chicago: The Art Institute of Chicago.
- Morgan, L. H. (1965). *Houses and house-life of the American aborigines*. Chicago: The University of Chicago Press.
- Mullin, M. H. (1995). The Patronage of difference: Making Indian art 'art', not ethnology. In G. E. Marcus & F. R. Myers (Eds.), *The Traffic in culture*. Berkeley: University of California Press.
- Napier, A. D. (1992). *Foreign Bodies: Performance, art, and symbolic anthropology*. Berkeley: University of California Press.
- Patterson, A. (1994). *Hopi pottery symbols*. Boulder, CO: Johnson Books.
- Paolozzi, E. (1985). *Lost magic kingdoms and six paper moons from Nahuatl: An exhibition at the Museum of Mankind*. London: British Museum Publications Ltd.
- Phillips, R. B. (1998). *Trading identities: The souvenir in Native North American art from the Northeast, 1700–1900*. Seattle: University of Washington Press and Montreal: McGill-Queen's University Press.
- Rhodes, C. (1994). *Primitivism and modern art*. London: Thames and Hudson.
- Rushing, W. J. III. (1995). *Native American art and the New York avant-garde: A history of cultural primitivism*. Austin: University of Texas Press.
- Rushing, W. J. III (Ed.). (1999). *Native American art in the twentieth century*. New York: Routledge.
- Sloan, J., & LaFarge, O. (1931). *Introduction to American Indian art*. New York: The Exposition of Indian Tribal Arts, Inc.
- Treuttner, W. H. (1979). *The natural man observed: A study of Catlin's Indian gallery*. Washington, DC: Smithsonian Institution Press.
- Wade, Edwin L. (Ed.). (1986). *The arts of the North American Indian: Native traditions in evolution*. New York: Hudson Hills Press.

Art—Overview

The emerging field of world art includes art made by human beings from the dawn of the species to the present era and across the globe, from Africa to Oceania (lands of the central and southern Pacific) and from Eurasia to the Americas. *Art* has many definitions, but here *art* refers to objects and techniques that human beings create and use, especially those that produce an aesthetic response and that have left some trace of their existence in the archaeological or historical record.

In addition to conventional historical theories and methods, world art may use interdisciplinary approaches from allied fields such as archaeology, anthropology, or art history. Traditionally art history focused on “fine art,” especially that created by known people from the cultures of the West, and anthropology focused on “crafts” from “non-Western” cultures and anonymous “artisans.” Now these studies and efforts are united in the field of world art.

World Art Subdisciplines

The media and subjects included in world art are diverse. Thus, world art encompasses performance arts, such as

As I see it, the world of sports is in very fine company, with a fine heritage. It is one of the Big Four. Only four kinds of events—politics, religion, the arts, and sports—have been able to draw consistently large crowds of paying customers throughout history. That must mean something. • BILL RUSSELL (B.1934)

drama, dance, and music; literary arts of language and literature; installation and environmental arts; electronic arts; and visual arts such as painting, sculpture, architecture, ceramics, jewelry, and textiles. Art made from permanent materials provides evidence that reaches furthest back in time.

Each of the many arts may be further refined into sub-disciplines. For example, textile arts might include many categories of fiber arts, such as costumes, wall hangings, quilts, tapestries, rugs, ropes, nets, and so forth. Methods of fiber manipulation and construction (such as spinning, looms, knitting needles, patterns of braiding or twisting), materials used (such as cotton, silk, hemp, or flax), purposes of the items (fishing, daily or ritual clothing, trading), particular times, places, and occasions of use are all specialties within themselves for each of the many media and arts that humans have generated around the world for thousands of years.

Importance and Uses of World Art

World art is an important field of study for many reasons. First, because it occurs everywhere in the world, world art demonstrates the universality of our pan-human neurology and nature. Our neurology and nature involve our sophisticated hand-eye coordination and our ability to symbolize, that is, to have one thing “stand for” another. The historian David Christian is among those experts who have observed that accumulated collective learning via symbolic representation is a driving variable in human dominance of the planet. World art is the study of this multimedia symbolic record.

Second, world art provides evidence of the particularity and diversity of our many societies, cultures, individual people, and artists. This evidence in turn supports specific studies of comparison and contrast. For example, one might consider the use of perspective in the second century of the Common Era by looking at paintings from the Han dynasty (206 BCE–220 CE) in China and wall mosaics in Rome.

Third, because humans made objects long before the relatively recent time of written records, world art extends

our world historic understanding into antiquity by tens of thousands of years. This extension provides a longer and more complete story of humanity.

Fourth, world art records evidence of human endeavors in modalities other than text, so these other modalities may be used as evidence to augment our understanding of any given historic period, to support studies of patterns through time and between and among various human groups, and to test historical hypotheses.

Fifth, world art has personal, social, and biological aspects. For example, people use it to represent cultural, social, and gendered identities, to communicate individual self-expression, to display wealth, to convey aesthetic experience, to teach values, to protest social norms, to aid memory, to present narratives, and generally to establish, maintain, and/or demonstrate relationships.

Any of these reasons may be expanded for particular historical studies. For instance, among the many ways to approach the subject of historic relations in world art are relationships between and among resource allocations and technologies employed; various cultures as they borrow ideas and trade raw materials or finished goods; kinship groups of humans; humans and the natural, “spirit,” or ancestor worlds, and so forth.

Evolutionary psychologists have said that artistic forms originally grew from within the body and humanity’s need to survive. They suggest, for example, that the widespread desirability of the hourglass female figure derives from its suggestion of fertility and hence the possibility of offspring to perpetuate the species. In their analysis through time the original context of the human body was transferred to other materials, such as clay figurines with this hourglass form. Others dispute the idea of female fertility, for example, in prehistoric figurines, and instead see models of animal brains.

Sixth, world art supports many kinds of teaching or research, such as chronological, geographical, area, or gender studies. Historians might look at how a specific art form or object changed through time in a certain location, or perhaps how ideas, techniques, materials, or forms of representation were transmitted, preserved, or transformed. For example, the evolution of the Buddha

For tens of thousands of years, humans made red ochre handprints on stone outcrops and cave walls. These remain an enduring prehistoric documentation of the human presence on every continent on earth. Contemporary handprint on birch bark, 12 × 14 inches (artist Kathleen Kimball).

image shows how Roman representations of deities were imported into the Gandaran region of India during the second through the sixth centuries CE. This evolution influenced the formation of a standardized Buddha image. This image was then modified as it subsequently traveled through Asia, so that in different countries and at different points in time, the Buddha image also reflected individual Asian cultures and styles.

Historians use genres of art to compare or contrast human groups in time and space. For example, historians might use portraiture in general or ritual death masks in particular to compare African civilizations such as those in Benin or Egypt with tribal societies such as the Yoruba. Historians may also use world art to support special area or period studies. For example, a historian studying the year 1000 CE might compare Islamic and European medieval calligraphies by considering variations in surfaces to which the calligraphy was applied, calligraphic styles, purposes of the writing, colors used, attitudes toward creation and divinity, and so forth.

Issues in the Field of World Art

Many issues exist in the field of world art. Some of these issues are similar to those in the field of world history, including the appropriate use of language, the challenge to move beyond a Eurocentric “Western civilization” framework, conceptual coherence of the field, and problems of data.

English and other Eurasian languages dominate world art scholarship. Too, the term *world art* may be confused with the term *non-Western art*, thus perpetuating the mistaken idea that world art is limited to “non-Western” human beings. People contest even what constitutes language and literacy. For example, in 1450 CE the Incan empire of South America extended for 5,500 kilometers and functioned, not with a phonetic writing system, but rather with a language of tied colored threads called “quipu.” People communicated meanings via methods of twisting, knotting, and manipulating the threads as well as their colors and how the threads were placed in rela-

tionship to one another. Scholars debate whether the art of quipu as a communication system is a form of literacy or numeracy as they compare and contrast its functions with the languages of Europeans who vanquished the Incan empire.

World art, which offers a long time line in the visual historic record and many objects for study, aids world historians as they determine an appropriate scale of study and locate pan-human threads of inquiry. This ancient and ongoing evidence of human material cultures and technologies includes diverse methods and purposes of art making as well as art objects themselves. Art as fact is ongoing evidence of multivalent (having many values, meanings, or appeals) symbolic behavior and meanings generated and contextualized through time and space. World art as visual history serves world historians whether they are pursuing traditional historic inquiries and themes, such as war, urbanization, empire, and migration, or more recent patterns and developments, such as environmental or “big history.”

Data problems include the difficulty of dating material remains and the typically European emphasis on “Western” culture. Material culture may be dated physically or chemically. Physical dating relies on finding objects “in context,” which means in stratigraphic (relating to geology that deals with the origin, composition, distribution, and succession of strata) layers or contiguous to other excavated remains. Often no trees are available for dendrochronology (tree ring dating). Carbon dating of objects has recently needed to be recalibrated, whereas chemical analysis may destroy at least a part of the object and is often costly. For these reasons many sites and objects are without firm dates.

Other questions that often surface involve ideas about development. For instance, to what extent do people borrow ideas (diffusion) versus independently invent them? We might try to answer this question by looking at specific art objects or their constituent parts, such as by considering the relations between image and text in medieval religious documents (e.g., insular gospels in western Eurasia and Buddhist sutra scrolls in eastern Eurasia).





Closeup of a woodcarving at Castlelord at Bunratty, Ireland.

databases of images and texts that museums and academic institutions make available, such as the collection and timeline of the Metropolitan Museum of Art in New York at www.met.org. For information about specific areas, scholars often turn to their regional organizations and journals. For example, to learn more about the arts of Oceania, one might turn to the Pacific Arts Association or the Association of Social Anthropologists for Oceania.

Other developmental questions exist. For example, how reciprocal are the borrowings between groups? Do arts move through progressive developmental stages in both individual people and/or societies? The work of Kellogg, Lowenfeld, and Gowan suggests that children move through progressive stages (e.g., from scribbling to using shapes to using ground lines) in illustrating their ideas. However, what happens to a person does not necessarily mirror what happens on the level of the entire society (ontogeny-phylogeny), and people long ago abandoned ideas of social Darwinism in the arts. Ontogeny is the development or course of development, especially of an individual organism; phylogeny is the evolutionary history of a kind of organism.

Literature in World Art

Thus far world art has relied mostly on the work of anthropologists and art historians; thus, the interests and biases of these fields have influenced scholarship to date. During the late 1980s the anthropologist Gayle Rubin related world art to technology, but visual anthropology largely uses video instead of text to document ethnography (study of cultures). Recently the art historian John Onians edited the comprehensive work *World Art Atlas* (2004), a monumental landmark and the first such work of its kind. Although to date no journals of world art exist as such, relevant journals, such as *Res* (anthropology and aesthetics) from Harvard and *Third Text* (critical perspectives on contemporary art and culture) from Routledge do exist. The fastest-growing world art resources are online

Appreciating World Art

Ways to appreciate world art include analysis of its formal elements and design principles, direct aesthetic experience, and relevant questions and answers. Analysis of formal elements leads to the articulation and understanding of a particular style. Formal elements include line, shape (two dimensions), form (three dimensions), texture, space (types of perspective and negative spaces), colors (tints, tones, shades), and values (degrees of light and dark). Design principles include balance (bilateral or asymmetrical), figure-ground relations, texture, composition, pattern (repetition), rhythm, movement, contrast, emphasis, harmony, and unity. Degrees of reality versus illusion and naturalistic rendering versus abstraction may also be included in an analysis.

In different times and different places ideas of aesthetic experiences have varied. During the first century CE Longinus's *On the Sublime* suggested that aesthetics is the experience of beauty. Contemporary descriptions of aesthetics include any emotional response to art and emphasize empathy between those people who make the objects or participate in events and those people who more passively view them. In many cases using multimodal arts supports a range of aesthetic experiences. For example, to maximize the aesthetic experience and understanding of aboriginal Australian dot paintings, one might listen to didgeridoo music while first viewing images of such paintings and then make a painting oneself.

In addition to asking what the aesthetic or other effects of art are, questions that one might ask to appre-

Every child is an artist. The problem is how to remain an artist once he grows up. • PABLO PICASSO (1881–1973)

ciate world art include: What is made or done? How is it done (e.g., techniques, methods, materials, preparations, epistemology)? By and for whom is it made? When and why is it made, used, performed? How long does it last, and what is its ultimate disposition (e.g., buried, destroyed, placed in a museum)? How do the people in the time and place being investigated view the object, its uses, and makers? Do similar items exist in one's own time and space?

Prehistoric Art

Humans used available materials to make art as permanent symbolic evidence of their presence for tens of thousands of years before the era of written history. These materials included bone, stone, ivory, antlers, amber, shells, teeth, and red ochre, which is a form of red iron oxide that is widely available across the planet. This art was sometimes portable, as in beads or figurines that could be carried or traded and thus moved from place to place. Alternatively art was parietal (meaning literally “on the wall” but generally meaning permanently attached, as in a rock or cave painting). Pictographs (paintings) and petroglyphs (marks that are carved, etched, or pecked into rocks) likely came after many tens of thousands of years of art making with less permanent materials, which are prone to decomposition and thus leave little trace in the archaeological record. These materials include skin, wood, grasses, feathers, and hair.

The oldest petroglyphs date from 43,000 BCE and are located in Panaramitee, Australia. These petroglyphs include circles, dots, and crescents. Most scholars accept the theory of African genesis, that is, that humans first evolved in Africa before 100,000 BCE. Therefore, we should not be surprised that this is also where researchers have found red ochre paint and painting tools, which are dated as far back as 77,000 BCE.

Interpreting Prehistoric Art

During different eras people have offered different interpretations of what prehistoric art might mean. These interpretations are not necessarily mutually exclusive, but

they often reflect the time period in which they are offered. For example, prior to 1900 CE, prehistoric art, like “fine art,” was thought of as art for art’s sake. Since 1970, when space travel and the “drug culture” became prevalent, people have widely suggested that prehistoric art related to shamanic (relating to a priest or priestess who uses magic to cure the sick, divine the hidden, and control events) trance, sympathetic magic, and archaeoastronomy (the study of the astronomy of ancient cultures).

Ice Age Art

40,000–10,000 BCE

Prehistoric arts were both parietal and portable during the last ice age. The oldest prehistoric paintings, also in Africa, show zebras and rhinoceroses in black and red and date from 26,000 BCE. Techniques include finger marking, engraving, low-relief sculpture and carvings, and outlined and shaded drawings but no ground lines. The more recent and better known European cave paintings of large animals in Lascaux, France, and Altamira, Spain, are dated to 17,000 BCE and 14,000 BCE, respectively. Red ochre handprints of varying dates are found all over the world, including Africa, Eurasia, the Americas, and Oceania. The oldest handprints located to date are from 13,000 BCE and are in Tasmania. Portable arts during the period of 40,000–10,000 BCE include thousands of fired clay figurines from central Europe dated from 22,400 BCE that seem to have been intentionally exploded in the fire.

Postglacial Art

10,000–5000 BCE

About 10,000 BCE the last ice age ended, and the glaciers that dominated the Northern Hemisphere began to melt and recede. In this milder climate between 10,000 BCE and 5000 BCE, people became more sedentary as hunter-gatherers and herding agriculturalists. In other words, they began to domesticate plants and animals. During this period in western Asia people used sun-dried bricks as a building material and baked clay in open fires to make vessels. Thus, the shift to more fixed locations



Closeup of a replica of a Renaissance bronze door from a cathedral in Florence, Italy.

marked an increased use of clay in general and fired clay in particular. By 6000 BCE people in Mesopotamia had invented the potter's wheel. The dates for shards from clay vessels vary with locations. The oldest found thus far are located in Japan and date from about 12,000 BCE. This Japanese tradition of fired clay vessels is called "Jomon" (meaning "rope-impressed design"), and it continued for more than ten thousand years, ending in 300 BCE.

5000–500 BCE

In general, from 5000 BCE to 500 BCE growing sedentary populations often produced urbanization, monumental architecture, formalized writing systems (the beginning of history), increased trade, and new materials, such as bronze with which to make objects. The occurrences of these phenomena vary with time and place. For example, Egypt developed hieroglyphics by 3000 BCE and built the Great Pyramid at Giza during a twenty-year period around 2650 BCE. Workers built England's Stonehenge in phases dated from 2950 to about 1600 BCE, and writing did not occur in England until invading Romans brought it during the first century CE.

Early on in Eurasia, the Americas, and Africa states often used writing and visual imagery to maintain records (such as grains owed for tribute), to communicate political propaganda (recording victories and rulers), and to create and decorate objects for ceremony, war, and burial. During this time individual artists were rarely known. As artists used more varied materials, a corresponding diversity of techniques developed. For example, weapons such as swords and shields became stronger because of more sophisticated bronze and iron metallurgy, and lapis lazuli (a semiprecious stone) was inlaid into gold.

500 BCE–600 CE

Although hunting and gathering societies continued throughout the period 500 BCE–600 CE, empires also grew and increasingly demonstrated human dominion of the planet. This dominion produced ever greater displays of beauty, power, and wealth by ruling elites, and the rise of world and state religions provided considerable content for world art. Around the world people became more powerful in their development and deployment of technology. For example, in Africa the use of iron expanded in the Niger River valley along with terra cotta figures (Nok), while in northern Europe the spreading Celtic culture created abstract representations in gilded bronze, silver, and gold jewelry for use in trade and burials. Writing surfaces changed, and portable writing surfaces improved. Vellum (scraped animal skin) in Europe and paper (invented during the first century CE) in China allowed texts (such as official orders from rulers or religious tracts) to spread along the Silk Road that connected Asia with the West. In Oceania the pottery tradition that began by 3000 BCE (and later became Lapita pottery) had disappeared by 1500 BCE, but Lapita designs continued in other materials, such as bark cloth (*tapa*) and tattoos.

600–1500 CE

During the period 600–1500 CE contact between people significantly increased. Religious beliefs (such as Christianity, Islam, Buddhism, Hinduism, and Daoism) spread, trade expanded, and wealth accumulated. As political and religious power increasingly fused, improved technologies brought more powerful weapons, bigger buildings, and more lavish pictures and sculptures. Meanwhile, in North America groups of people remained relatively small as they exploited a range of ecological niches, making diverse arts from available materials. Complex art histories exist for many village cultures and empires that flourished in varying degrees throughout Central America (Maya and Aztec) and South America (Inca), leaving a rich legacy of carved stone, architecture, metal work, textiles, and ceramics. African groups also used many materials, as we can see from the great stone-walled city of Zimbabwe (1000 CE) to Ife cast copper

Roman mythological wall painting uncovered in the ruins of Pompeii, Italy.

masks, Ibo bronze open-weave altar stands, and Dogon ancestral wood carvings. Migrating groups, including the Maori, who arrived in New Zealand around 1200 CE, increasingly inhabited Oceania.

1500–1800 CE

During the period 1500–1800 CE change accelerated to the point of revolution. Improved transportation (better ships and navigation) brought faster trade of more goods and ideas; competition grew between Eurasian rulers to display wealth (for example, to build larger cities and buildings, such as in Paris, France, Istanbul, Turkey, and Edo, Japan). Changes came for ordinary people, too; where the wealthy could buy original oil paintings, prints (wood block and movable type) afforded large numbers of people access to images for a wide range of purposes, from devotion to secular wall decorations. Social, political, and industrial revolutions were reflected in changing arts. Optics (perspective drawing, telescopes, eye glasses, etc.) suggest that people were seeing the world in new ways. These new ways were reinforced by the discovery and exploitation of both people and resources in the Americas, Africa, and Oceania as Europe colonized the rest of the world and divided the spoils of conquest.

1800–Present

After 1800 increasingly mechanized (re-)production of goods and communications media relied on advancing technology and redefined human experience, identity, and art for an ever-expanding population. For example, commonplace use of photography made portrait painting largely obsolete, and e-mails often replaced handwritten letters; museums, which first became culture barns filled with objects from around the world, often became electronic image databases as well; scientific methods supported the development of electricity, combustion engines, new communications technologies (e.g., computers, fax, film), new materials (e.g., concrete, steel, polyester), and so forth. Boundary questions, such as international versus national, regional, or ethnic styles, were widespread.

Reactions to these changes included many artistic “-isms,” that is, styles such as symbolism, impressionism,



cubism, futurism, modernism, and postmodernism. These “-isms” and other movements each offered a slightly different comment on the human condition. For example, the arts and crafts movement elevated work done by the human hand, “earthworks” emphasized human relationships with nature, performance artists revalued the subjective moment, feminism argued for female equality by raising awareness of patriarchal Western art traditions, and pop art glorified the mass-produced commonplace items of everyday life. Within cultures that had been colonized by the Europeans, questions rose about how to preserve authentic traditions even while seeking access to contemporary materials, tools, galleries, collectors, and connoisseurs.

World Art Today

Inspiration for world art as an expressive communication and/or information movement is expanding through both widespread tourism that moves men and women and computers that move bits and bytes. Visual and auditory global exchanges are commonplace, and new art fields, such as “visual culture” and world art, are growing. Art education, organizations, and techniques are spawning around the world as public art (art in public places), community art (art made collaboratively within and by communities of people), and individual artists in their studios increase their use of machines into the twenty-first century. As world art supports teaching diversity and accommodates multiple intelligences, it has the potential to become an educational axis mundi (global turning point). In the meantime, the growing field of world art symbolizes the spectrum of human creativity and provides a treasure trove for world historians.

Kathleen I. Kimball

Further Reading

- Adams, L. S. (2004). *World views: Topics in non-Western art*. New York: McGraw.
- Bahn, P. G. (1998). *The Cambridge illustrated history of prehistoric art*. Cambridge, UK: Cambridge University Press.
- Campbell, J. (1988). *Historical atlas of world mythology* (Vols. I & II). New York: Harper & Row.
- Christian, D. (2004). *Maps of time*. Berkeley and Los Angeles: University of California Press.
- Dissanayake, E. (1992). *Homo aestheticus*. New York: Free Press.
- Eliade, M. (1991). *Images and symbols* (P. Mairet, Trans.). Princeton, NJ: Princeton University Press.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic.
- Gowans, A. (1979). Child art as an instrument for studying history. *Art History*, 2(3), 247–274.
- Hagens, B. (1991). Venuses, turtles, and other hand-held cosmic models. In M. Anderson & F. Merrell (Eds.), *On Semiotic Modeling* (pp. 47–60). New York: Mouton.
- Honour, H., & Fleming, J. (2002). *The visual arts, a history* (6th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Kleiner, F., Mamiya, C. J., & Tansey, R. J. (2001). *Gardner's art through the ages* (11th ed.). Florence, KY: Wadsworth.
- Lazzari, M., & Schlesier, D. (2001). *Exploring art*. New York: Wadsworth.
- Lewis-Williams, D. (2002). *The mind in the cave*. London: Thames and Hudson.
- Lowenfelt, V., & Brittain, W. L. (1987). *Creative and mental growth* (8th ed.). New York: Macmillan.
- Nochlin, L. (1999). *Representing women*. New York: Thames & Hudson.
- Ochoa, G., & Corey, M. (1995). *The timeline book of the arts*. New York: Ballantine.
- Ohnuki-Tierney, E. (Ed.). (1990). *Culture through time*. Stanford, CA: Stanford University Press.
- Onians, J. (2004). *Atlas of world art*. London: Laurence King.
- Roughley, N. (Ed.). (2000). *Being humans*. New York: de Gruyter.
- Schuster, C., & Carpenter, E. (1996). *Patterns that connect*. New York: Abrams.
- Shlain, L. (1991). *Art & physics: Parallel visions in space, time, and light*. New York: Quill/William Morris.
- Stafford, B. M. (2001). *Visual analogy*. Boston: MIT Press.
- Stockstad, M. (1999). *Art history* (Rev. ed.). New York: Abrams.
- Urton, G. (2003). *Signs of the Inka Khipu*. Austin: University of Texas Press.
- Werness, H. B. (2000). *The continuum encyclopedia of native art*. New York: Continuum.

Art—Russia

Russian art is far less well known than Russian literature or music, but it has a rich and fascinating history.

Early Russian Religious Art: 1000–1700

The Russian acceptance of Christianity from Orthodox Constantinople around 988 BCE determined the distinctive forms of Russian religious art. These included churches with cupolas, which later evolved into “onion” domes, and images of Christ, the Virgin Mary, and the saints. Icons, mosaics, and frescoes were windows to heaven, depicting holy persons in their transfigured state, beyond the boundaries of the natural world. Generally icons were unsigned, painted by a collective of artists as an act of worship. This sacred art, protected from radical innovation by theology, dominated Russian culture for centuries.

The Mongol invasion of 1237–1240 and occupation to 1480 limited Russia’s contacts with Western culture without radically influencing its Christian art, although Oriental influences can be detected in applied and decorative art. Russia’s most revered icon painter was Andrei Rublev (c. 1360–1430). His “Old Testament Trinity” (1420s?), three angels harmoniously grouped, is perhaps the best known of all icons. From the 1470s through the 1490s Italian architects constructed many buildings in Moscow’s Kremlin, but the secular art of the Renaissance made little impact. No realistic likeness survives even of Ivan the Terrible (Ivan IV, reigned 1533–1584), although he and other Russian rulers appear in idealized form in religious art.

The seventeenth century is known as an age of transition in Russian culture. Influences entered from Ukraine, annexed to Russia in the 1650s, and from Belarus, both of which, as part of Poland, had experienced Catholic Baroque culture. The ornate style of the later seventeenth century is sometimes known as Moscow Baroque. Some Western European artists and craftsmen entered the czars’ service, working in the Kremlin studios, where they contributed to the production of the first stylized portraits of Russian rulers and nobles. The icon *The Tree of the Muscovite State* (1668) by the Moscow artist Simon Ushakov (1626–1686) contains a small portrait of Czar Alexis I (reigned 1645–1676). Ushakov incorporated ele-

“The Threshing Barn” by Russian painter Aleksei Venetsianov (1780–1847). This painting, like so many of Venetsianov’s, depicts peasants and village life.

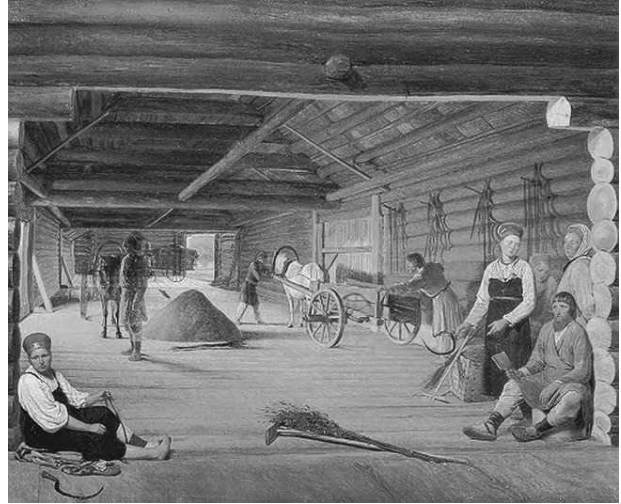
ments of Western perspective and lighting effects into this and other icons. Alexis’s daughter Sophia (1657–1704) was perhaps the first Russian woman to have her portrait painted; generally the segregation of upper-class women from male society created strong resistance to female portraiture.

Eighteenth-Century Cultural Reforms

The modernizing czar Peter the Great (Peter I, reigned 1682–1725) brought radical changes to Russia and made the country a major European power. The showcase for Peter’s cultural reforms was his new capital and “window on the West,” Saint Petersburg, founded in 1703. Virtually all of Peter’s chief artists and architects were foreigners. Frenchman Louis Caravaque and German Gottfried Tannhauer painted portraits and battle scenes and helped to train a new generation of Russian secular artists. These included the former icon painter Ivan Nikitin (c. 1680–1742?), who also studied in Italy. Peter hired the Italian sculptor Carlo Rastrelli (1675?–1744), but Orthodox suspicion of “graven images” retarded the development of a Russian school of sculpture.

Peter’s reign marked the beginning of an “era of apprenticeship,” when Russia mastered the conventions of Western art under the sponsorship of the imperial court and aristocracy. High art rarely penetrated into the peasant village, where culture retained traditional features. However, the barrier between the Westernized upper classes and the peasantry was not impenetrable. Folk art assimilated Baroque and Classical decorations, while educated Russians collected *lubok* woodprints and read folktales.

In 1757 the empress Elizabeth Petrovna (reigned 1741–1761) founded the Academy of Arts in Saint Petersburg. With a curriculum rooted in the study of classical history and classical models, it remained the unchallenged center for training Russian artists, architects, and sculptors until the mid-nineteenth century. Successful graduates were sent to France or Italy for further training.



In 1764 Catherine the Great (Catherine II, reigned 1762–1796) issued the academy’s charter of imperial patronage. Catherine was an avid collector, buying numerous paintings by old masters and works of applied art. The first Russian professor of painting was Anton Losenko (1737–1773), whose *Vladimir and Rogneda* (1770) was the first work on a theme from Russian history. The many portraits by Dmitry Levitsky (1735–1822), “Russia’s Gainsborough,” include the allegorical *Catherine II in the Temple of Justice* (1780s) and seven canvases from the 1770s depicting students of the Smolny Institute for Noble Girls. Other successful portraitists were Fedor Rokotov (1736–1808/9) and Vladimir Borovikovskii (1735–1825). The range of Russian subject matter was still limited, however. Aristocratic patrons preferred Italian and classical vistas to scenes of the Russian countryside or town. Serf artists too were trained in Western idioms—see, for example, *Portrait of an Unknown Woman in Russian Dress* (1784) by the serf artist Ivan Argunov (1729–1802). Only a few paintings of peasants survive, including studies of a betrothal and a meal by the serf Mikhail Shibanov (?–1789?).

From Romanticism to Realism: 1800–1880

Napoleon’s burning of Moscow in 1812 and the march on Paris by Alexander I (reigned 1801–1825) in 1814 aroused patriotic feelings about Russian culture. German Romantic ideas about national “spirit” (*geist*) stimulated a search for Russian themes, as did the slogan of “Orthodoxy, Autocracy, and Nationality” propagated by Nicholas



I (reigned 1825–1855). The portrait of Alexander Pushkin (1827) by Orest Kiprensky (1782–1836) depicts Russia’s national poet inspired by his muse. The nobleman Aleksei Venetsianov (1780–1847) produced numerous studies of the serfs on his estate, often in arcadian settings (*Spring Ploughing* and *Summer Reaping*, both from the 1830s). The leading academic artist of his generation was Karl Briullov (1799–1852). His huge canvas *Last Day of Pompeii* (1833), painted in Rome, was the first major work by a Russian artist to win acclaim abroad. The masterpiece of Alexander Ivanov (1806–1858), who also worked in Rome, was *The Appearance of Christ to the People* (1837–1857), a biblical scene prefiguring what Ivanov believed to be the Russians’ destiny as God’s chosen people. A master of a much smaller scale was the Saint Petersburg artist Pavel Fedotov (1815–1852). In works such as *The Fresh Cavalier* (1846) and *The Major’s Courtship* (1848), he satirized the ridiculous pretensions and the quest for rank and wealth in Saint Petersburg society.

By the 1850s many artists were painting scenes from everyday Russian life. Their works often featured stock types, such as poor widows, appealing orphans, and fallen women, but some brought a more direct edge of social criticism to their work, for example, Vasily Perov (1833–1882) in such works as *Village Easter Procession* (1861), featuring drunken priests and peasants in a squalid setting. In 1863 fourteen students in search of greater independence, led by Ivan Kramskoi (1837–1887), walked out of the Academy of Arts, a gesture wholly in the spirit of Russia’s Age of Reform under Alexander II (reigned 1855–1881). In 1871 a group of artists led by Kramskoi established the Society of Traveling (Itinerant) Art Exhibitions to extend art appreciation beyond Saint Petersburg and Moscow and widen the market for their work. Exhibitors came to be known as Itinerants or Wanderers (*peredvizhniki*). Their work was Realist in style and overwhelmingly Russian in subject matter: social narratives about the sufferings of the peasantry and workers, scenes from Russian history, portraits of progressive celebrities, Russian landscape. Many of

these paintings were bought or commissioned by the merchant Pavel Tret’iakov (1832–1898), who in 1891 presented a national gallery to the people of Moscow. The most successful Realist painter was Ilya Repin (1844–1930), a master of technique whose career was launched by *Barge Haulers* (1873), a study of the dignity of hard physical labor. Repin’s subjects include panoramas of Russian rural society (*Procession in Kursk Province*, 1883), intimate portraits of family and friends, and dramatic narratives, both contemporary (*They Did Not Expect Him*, 1884) and historical (*Ivan IV and His Son Ivan*, 1885). Other artists celebrated the Russian landscape. Ivan Shishkin (1832–1898) specialized in precise depictions of trees and forests. Arkhip Kundzhi (1841–1910) experimented with dramatic lighting effects (*Birch Grove*, 1879), while Isaak Levitan (1860–1900) revealed the spiritual qualities of “everyday” Russian nature (*Above Eternal Rest*, 1894). The large canvases of Vasily Surikov (1848–1916) evoked the grand narratives of Russian history, such as General Suvorov crossing the Alps (painted in 1899), but also contained scenes in which the Russian people were the heroes, for example, *Boiarynia Morozova* (1887), in which crowds watch a dissident noblewoman being carted off to prison. Scenes from contemporary history by Vasily Vereshchagin (1842–1904) gave a more ambivalent view of the spread of Russian empire through imperialist wars. His *Apotheosis of War* (1871) shows a pile of skulls on an old battlefield.

Birth of Modern Russian Art

The cradle of modern Russian art was the artists’ colony at Abramtsevo, a country estate to the north of Moscow owned by the merchant-industrialist Savva Mamontov (1841–1918). Among those who gathered there in the 1880s and 1890s were Vasily Polenov (1844–1927), a pioneer of Russian plein air painting; Konstantin Korovin (1861–1939), “Russia’s first impressionist”; and Valentin Serov (1865–1911), who later became Russia’s favorite society portraitist. Elena Polenova (1850–1898) designed furniture inspired by local crafts and explored the

world of Russian folktales, as did Viktor Vasnetsov (1848–1926). His painting *Epic Warriors* (1898) became a sort of icon of Russian masculinity defending the motherland. Vasnetsov and Mikhail Nesterov (1862–1942) showed a new appreciation of icons and Orthodox spirituality. A major associate at Abramtsevo was the highly original Mikhail Vrubel (1856–1910). The fragmented brushwork of his *Demon Seated* (1890), a study of good and evil, prefigures Cubism. Other works depict scenes where figures blend with vegetation or water in half-light (*Swan Princess*, *Epic Warrior*, *Pan*, all from the 1890s).

Vrubel was greatly admired by the Saint Petersburg-based World of Art group (*Mir iskusstva*), whose driving forces were the art historian and painter Alexander Benois (1870–1960) and impresario Sergey Diaghilev (1872–1919). In the glossy *World of Art* magazine (1898–1904) and in exhibitions, World of Art aimed to educate an elite public in art history and appreciation. They rejected the more didactic Realist work of the Itinerants in favor of aestheticism, a cult of beauty and nostalgia for times past, such as that evoked by Viktor Borisov-Musatov (1870–1905) in his visions of languid women. Konstatin Somov (1869–1939) explored erotic and homoerotic subjects, while the graphic artist Ivan Bilibin (1876–1942) illustrated fairy tales. World of Art aesthetics fused with the performing arts in Diaghilev's Ballets Russes (first European season 1909). Major contributors to set and costume design were Leon Bakst (1866–1924) and Nikolai Roerich (1874–1947).

World of Art's dissemination of works by Cézanne, Gauguin, van Gogh, and others and purchases of modern Western art by entrepreneur collectors paved the way for Russia's own prominence in the avant-garde. In the first two decades of the twentieth century, as new art movements swept Europe, Russian artists, often after a spell in Paris or Berlin, made their own original contributions. Pavel Kuznetsov (1879–1968), for example, promoted Symbolism with his painting *Blue Fountain* (1905) and the *Blue Rose Exhibition* (1907). The Russian avant-garde was showcased in exhibitions such as *Knave of Diamonds* (1910), *Donkey's Tail* (1912), and *Target* (1913).



Russian avant-garde painter Liubov' Popova (1889–1924) is best known for experimenting with Cubism and Futurism, as demonstrated in her 1915 work “Sketch for Portrait.”

Mikhail Larionov (1881–1964) and Natalia Goncharova (1881–1962) declared that Western art had nothing to teach Russia. These and other artists found inspiration for their neoprimitivist works in peasant villages, city low life, icons, *lubok* prints, signboards, and painted toys. The most innovative was Kazimir Malevich (1878–1935), who passed through Impressionism, Primitivism, and Cubo-Futurism (a fusion of French Cubism and Italian Futurism: see *The Knifegrinder*, 1912) to reach his own Suprematism, heralded by exhibiting his seminal *Black Square*, the “zero of form,” at the “0.10” exhibition in 1915. At the same time Wassily Kandinsky (1866–1944) in Germany was pursuing his own experiments in the reduction of figurative elements and expressiveness of colors and shapes (*Improvisations*, 1910–1920). Artists such as Alexandra Exter (1882–1949), Vladimir Tatlin (1885–1953), Natalia Udaltsova (1885–1961), Marc

Chagall (1887–1985), and Liubov Popova (1889–1924) contributed to a great flood of innovative art in the last decade of czarism.

The Russian Revolution and Soviet Art: 1917–1953

After the Bolshevik coup of October 1917, avant-garde artists rushed to assume the artistic leadership of revolutionary Russia. Malevich, Kandinsky, Chagall, and others joined the new art organizations set up under Anatoly Lunacharsky's Commissariat of Enlightenment. During the Civil War and the period of the New Economic Policy (1918–late 1920s) a gamut of artistic creeds and styles coexisted. At first the Bolsheviks had no blueprint for the arts, but welcomed all who served the cause. Lenin opposed radical appeals to eliminate all "bourgeois" art, urging the preservation of "the best of the past" alongside proletarian art. Posters and street decorations for mass parades fused abstract and figurative designs. One of the era's most revolutionary creations was Tatlin's *Monument to the Third International* (1919–1920), with a dynamic spiral form and technological features so advanced that the work could not actually be constructed. The Constructivists rejected easel painting altogether and concentrated their efforts on design. Characteristic of this exciting period were the advertisements, posters, and photography of Alexander Rodchenko (1891–1956), theater and clothing designs by Varvara Stepanova (1894–1958), and the bold graphics of El Lissitzky (1890–1941).

By the late 1920s the avant-garde increasingly was being accused of "inaccessibility," its "decadent" Western features contrasted with the "progressive" Realist art of the first workers' state. With the consolidation of the one-party state under Joseph Stalin and the completion of the first phases of industrialization and collectivization, a monolithic artistic establishment emerged. In 1934 Socialist Realism was launched at the first Congress of Soviet Writers. Aleksei Zhdanov summoned writers and artists to depict "reality in its revolutionary development" and to provide "a glimpse of tomorrow." Socialist Realist

works were supposed to inspire by embodying qualities of popular accessibility, Party spirit, ideological content, and "typicality." Among the best early exponents were Alexander Samokhvalov (1894–1971), who used sport and physical culture as metaphors for progress, and Alexander Deineka (1899–1969), who produced bold monumental paintings on labor themes. A Socialist Realist classic was *Collective Farm Festival* (1937) by Sergei Gerasimov (1885–1964), who "glimpsed tomorrow" in groaning tables of festive fare. In sculpture the colossal *Worker and Collective Farm Woman* (1937) by Vera Mukhina (1889–1953) became an icon of the USSR. Themes reflected the times, for example, scenes of heroic struggle and partisans during World War II.

From the Thaw to the Fall: 1953 to the Present

With Stalin's death in 1953 and Nikita Khrushchev's de-Stalinization came a thaw in the arts, allowing more scope for private themes and individual expression. But the focus was still on the positive and Khrushchev himself famously denounced abstract art. In the 1960s and 1970s some artists tested the boundaries of official art by expanding the subject matter of Realism or by experimenting. The authorities quickly closed independent exhibitions, most blatantly by bulldozing an open-air art show in 1974. Many artists left the USSR for the West, while others turned their backs on the West, for example, Ilya Glazunov (b. 1930), who explored the pre-Revolutionary, Orthodox past (*Eternal Russia*, 1988). In the era of glasnost and perestroika nonconformist artists such as Eric Bulatov (1933), Ilya Kabakov (b. 1933), and Anatoly Zverev (b. 1931) were able to operate more openly. Since the fall of the USSR pluralism has been the watchword of the "second avant-garde," embracing irreverent pastiches of Socialist Realism and Soviet symbols, religious themes, abstraction, grotesquerie, nostalgia, eroticism and kitsch, pop art, and video and installation art.

The past decade has seen the virtual elimination of censorship, the opening of commercial outlets for sales

and exhibitions, a buoyant market for Russian art, both in Russia and abroad, and a flood of Russian publications on previously neglected topics such as the pre-Revolutionary avant-garde and religious painting. Russian artists, it seems, will continue to work on the cutting edge of contemporary art, while enjoying more opportunities than ever before to assimilate national artistic traditions.

Lindsey Hughes

See also Russian-Soviet Empire

Further Reading

- Billington, J. (1966). *The icon and the axe*. London: Weidenfeld & Nicolson.
- Bird, A. (1987). *A history of Russian painting*. Oxford, UK: Phaidon.
- Bowlit, J. (Ed.). (1999). *Amazons of the avant-garde*. London: Royal Academy of Arts.
- Cracraft, J. (1997). *The Petrine revolution in Russian imagery*. Chicago: Chicago University Press.
- Cullerne-Bown, M. (1998). *Socialist realist painting*. New Haven, CT: Yale University Press.
- Figes, O. (2002). *Natasha's dance. A cultural history of Russia*. Harmondsworth, UK: Penguin Books.
- Gray, C. (1996). *The Russian experiment in art 1863–1922*. London: Thames and Hudson.
- Gray, R. (2000). *Russian genre painting in the 19th century*. Oxford, UK: Clarendon Press.
- Grierson, R. (Ed.). (1992). *Gates of mystery: The art of holy Russia*. Fort Worth, TX: InterCultura.
- Hamilton, G. H. (1983). *The art and architecture of Russia*. Harmondsworth, UK: Penguin Books.
- Kirichenko, E. (1991). *The Russian style*. London: Laurence King.
- Lincoln, W. B. (1998). *Between heaven and hell: The story of a thousand years of artistic life in Russia*. New York: Viking.
- Lodder, C. (1983). *Russian constructivism*. New Haven, CT: Yale University Press.
- Milner, J. (1993). *A dictionary of Russian and Soviet artists*. Woodbridge, UK: Antique Collectors' Club.
- Petrov, V. (Ed.). (1991). *The World of Art movement in early 20th-century Russia*. Leningrad, Russia:
- Petrova, Y. (2003). *Origins of the Russian avant-garde*. St. Petersburg, Russia: Palace Editions.
- Sarabianov, D. V. (1990). *Russian art: From neoclassicism to avant-garde*. London: Thames and Hudson.
- Valkenier, E. (1989). *Russian realist art. The state and society: The Peredvizhniki and their tradition*. New York: Columbia University Press.
- White, G. (Ed.). (1998). *Forbidden art: The postwar Russian avant-garde*. Los Angeles: Curatorial Assistance.
- White, S. (1988). *The Bolshevik poster*. New Haven, CT: Yale University Press.

Art—South Asia

The cultural beliefs, ideas, and practices that find visual expression in the art of South Asia—which includes the present-day nations of India, Pakistan, Afghanistan, Bangladesh, Nepal, and Sri Lanka—have had a formative influence on the rest of Asia and continue to provide important paradigms of being and becoming in modern world culture.

Sculpture

The beginnings of South Asian sculpture may be found in the early Indus-Sarasvati civilization (present-day northwestern India and eastern Pakistan) of the second millennium BCE. The mature phase of this civilization (2500–1700 BCE) carries evidence of a high level of technical knowledge and skill but, curiously, a lack of monumental sculpture or large structures such as temples or palaces. From its ruins, small figurines in stone or cast bronze or copper have been recovered, as well as terracotta animals and female figurines, the last presumed to be cultic objects. A large number of steatite seals with impressions of bovine unicorns, buffaloes, bulls, tigers, rhinoceros, other and composite animal figures, and some enigmatic human forms, surmised to have either commercial or ritual uses (or both), have been recovered.

MAURYAN SCULPTURE, c. 324–c. 200 BCE

Little material evidence has been found between this period and the imperial Mauryan remains of the third century BCE. The reasons for this absence are unclear, but the use of perishable materials of construction and prohibitions against and/or alternatives to representational portrayals of deities are possibilities. Vedic ritual culture is presumed to have established itself around 1500 BCE, followed by the contemplative esotericism of the Upanishads around 800 BCE and the birth of Buddhism and Jainism in the sixth century BCE.

In 326 BCE, the incursion of Alexander of Macedon



The god Vishnu carved in stone adorns the interior wall of a Hindu temple in India.

into the northwest border of the South Asian subcontinent, as part of his conquest of the extensive Persian Achaemenid empire of Darius III (330 BCE), created a political vacuum that was swiftly filled by the first Mauryan king, Chandragupta (reigned c. 321–297 BCE). Chandragupta's imperial ambitions were styled after Darius and Alexander, and to his successor Asoka (reigned c. 273–232 BCE) is attributed the Persian practice of building stone monuments and the incorporation of Achaemenid and Hellenistic motifs and devices in his structures. In 265 BCE Asoka embraced Buddhism and

proceeded to mark numerous prominent pilgrimage routes and Buddhist centers through his vast empire with tall polished stone pillars inscribed with edicts expounding the Buddhist Law. Though this practice and the literary style of the inscribed proclamations are reminiscent of an Achaemenid device for establishing the law of the emperor, it also extends an ancient indigenous Vedic tradition of the cosmic pillar. Achaemenid and Hellenistic decorative motifs, such as rosettes, palmettes, spirals and reel-and-bead patterns, appear on these pillars and on other structural remains from Asoka's time, attesting to the cosmopolitan nature of his court and its culture.

Other monuments attributed to Asoka's patronage include Buddhist stupas, or relic-mounds, and rock-cut caves, both of which became important settings for sculpture for a thousand or more years. Asokan monuments were created in sandstone and finished to a high polish, a technique that was lost to South Asia after Mauryan times.

A number of massive, frontal stone sculptures depicting male and female figures also remain from Mauryan times. These are representations of *yakshas* and *yakshinis*, supernatural elementals that had been in popular propitiatory worship for protection, fertility, or wealth. These beings and the gods of the Vedic pantheon became assimilated into early Buddhism and soon reappeared iconically as Buddhist threshold deities, protectors of devotees, bestowers of auspiciousness, and servants of the Buddha.

SCULPTURE DURING THE SHUNGA DYNASTY, c. 185–73 BCE

The Mauryan dynasty lasted for hardly fifty years after the death of Asoka and was followed by the Brahminical Shunga dynasty in northern South Asia. Buddhist lay patronage, however, had developed a strong foundation, and monastic monuments continued to flourish during the second century BCE. Typical examples of the sculpture of this period are found among the remains of the stupa of Bharhut. The circular stone railing (*vedika*) enclosing the stupa has carved roundels on its horizontal and vertical elements, often elaborated into ornate

lotuses. Some of these contain carvings of human heads or animals at their center and some are filled in with narrative scenes from the life of the Buddha or episodes from tales of his past lives. At this stage, Buddha's figure is never depicted; instead we see symbols such as the Bodhi tree (under which the Buddha attained enlightenment), the Wheel of the Law, or a stupa, according to narrative context. The relief carving is shallow and frontal and harks back to a tradition in wood. On the vertical entrance-posts of the *vedika* are chiseled large figures of *yakshas* and *yakshinis*, standing on animal or dwarf mounts.

This post-Mauryan Buddhist relief tradition reaches its full maturity around the first century BCE, as evidenced in the gateways (*torana*) of the Great Stupa at Sanchi. This stupa, at the center of a monastic complex, was established by Asoka and further enlarged during Shunga times. Around 100 BCE, during the reign of the Satavahanas, four great gateways were provided at the cardinal entrances to this stupa. The horizontal and vertical elements of these gateways carry carvings thematically similar to those at Bharhut. However, these carvings demonstrate much greater assurance, the narrative arrangements, particularly on the extended horizontal architraves, showing a refined clarity of form, a varied mobility of posture and a judicious use of devices to enhance sense of depth where necessary. Large and powerful figures of elephants, lions, or dwarfs are carved out deeply on the vertical pillars and seem to support the upper portions. But perhaps the most perfect realizations on these gates are the *shalabhanjikas*, now almost disengaged from the stone, the rhythmic swing of their voluptuous forms naturalistically postured against the fruiting branches. The perfect combination of ecstatic sensuousness and contemplative repose in these figures becomes one of the aesthetic ideals of South Asian sculpture, seeking fulfillment in different forms through history.

SCULPTURE DURING THE KUSHAN DYNASTY, 78–200 CE

Around the beginning of the Christian era, the Kushan dynasty, originating in the borderlands of Central Asia and China, established itself as the imperial power in

northern South Asia. The most famous king of this dynasty was Kanishka (reigned 78–101 CE). It is around this time that the first figural depictions of the Buddha make their appearance, almost simultaneously in the northwest province of Gandhara and the Gangetic metropolis of Mathura. Reasons for this iconic appearance are unknown, but may be related to doctrinal shifts in Buddhism from the more austere Theravada Buddhism towards the devotionism of Mahayana Buddhism. A consistent iconography finds expression in both the Gandhara and Mathura Buddha images, though they are stylistically divergent. The Gandhara Buddha is modeled after a Greco-Roman Apollonian prototype, while the Mathura figure derives from indigenous *yaksha* traditions. In both cases, the Buddha is draped in monastic robes, has a halo behind his head and a whorl of hair between the eyebrows (*urna*), and is shown with a cranial protuberance (*ushnisha*) symbolizing transcendental knowledge. He is seated in meditation or standing erect with his right hand raised in a gesture of bestowing fearlessness.

But whereas a predominant naturalism marks the features and costuming of the Gandhara figure, the Mathura image is characterized by its simplified rounded features, its see-through draping and its monumentality and physical tension projecting power. Bodhisattva figures in the characteristic styles of Gandhara and Mathura also appear at this time, wearing regal accoutrements and, in the case of named and worshipped bodhisattvas, carrying their distinctive attributes. The Kushan period also yields the earliest Brahmanical images in stone, representing the three major cults of Hindu worship—those devoted to Siva, Vishnu, and the Mother Goddess, particularly in her form as Durga, the destroyer of evil. Other prominent Brahmanical deities represented include Surya and Skanda.

SCULPTURE UNDER THE GUPTAS, (c. 320–c. 500)

During the fourth century, a new Hindu imperial dynasty established itself in northern South Asia, whose reign, patronage, and courtly culture are credited with the development of the classical style in South Asian art. This

was the Gupta dynasty, whose most famous king was Candragupta II (reigned 375–415 CE). During this period, the major center for the production of Buddha images in the east shifts from Mathura to Sarnath and the Kushan Buddhas are replaced stylistically by a type characterized by its idealized soft modeling and the self-absorbed tranquility of its features. A standardization and compaction of iconic elements and a vocabulary of distinctive hand gestures (mudras) marking special occasions, accompanies these images. Others in the Buddhist pantheon undergo a similar elaboration and stylistic change, the Buddha and several bodhisattvas also appearing in bronze casting.

A proliferation of Hindu deities, organized spatially in integrated contexts of ritual worship, are produced in this period. Initially, the sites for these reliefs are niches in cave-temples, but the stand-alone Hindu temple in stone also evolves at this time and henceforth becomes the setting for sculpture. The Guptas being followers of Vishnu, images of this deity and his incarnations, or avatars, find frequent representation. An increased emphasis on goddesses and other female images also occurs at this time.

A developed Saivite iconography, depicting mythical episodes connected with Siva and his consort, Parvati, also finds expression at sites of cultic worship. Saivite cultic placement consigns the abstract phallic icon of Siva (the lingam) to the sanctum, faced from the entrance of the temple by Siva's mount, the bull Nandi, and surrounded along a clockwise circumambulatory path by niches carrying other gods and goddesses and scenes showing the pastimes of Siva.

By the end of the fifth century, all these figures evolve an aesthetic that shares the monumental repose of the Gupta Buddha but integrates this with a power of massiveness and restrained ecstatic delight. Contemporaneously, in the Deccan (central India), a related but more voluptuous aesthetic developed in Buddhist and Hindu figural expression, under the patronage of the powerful Vakatakas, related by marriage to the Guptas. Examples of the full fruition of the Vakataka Buddhist style are visible at the cave excavations at Ajanta in southern central India, while the early excavations at nearby Ellora or at

the island of Elephanta, dateable to the early sixth century, show us examples of Deccan Saivite sculpture of this period at its ripeness.

DEVELOPMENTS IN SCULPTURE, SIXTH–TWELFTH CENTURIES

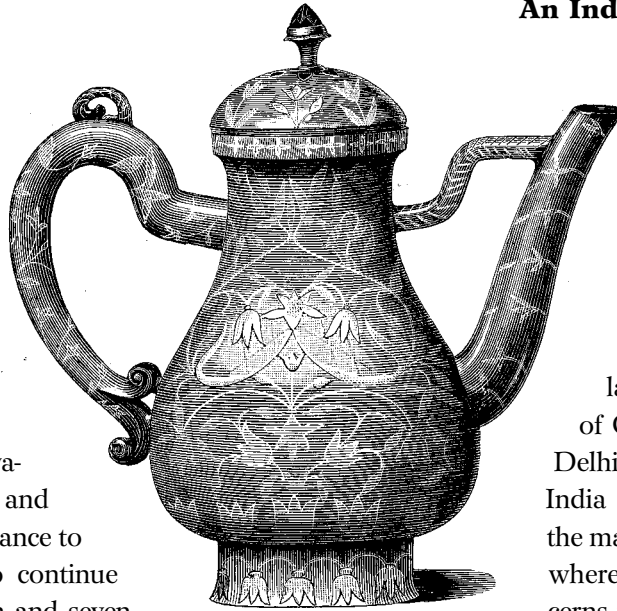
Though the stand-alone Hindu stone temple first appears in South Asia under the Guptas, it evolves into maturity in the sixth century under the Western Calukya dynasty (543–757; c. 975–c. 1189) in the southern Deccan, and through the seventh century in southern India under the Pallavas (c. 550–728 CE). Sculpture during this period continues to develop local variants of the Gupta iconography and style, but a marked tendency is also visible in these southern centers towards an infusion of greater plastic dynamism into the figures. A fine example of this may be observed in a panel from seventh-century Pallava Mamallapuram depicting Durga battling the buffalo demon. The iconic stillness and massiveness of Gupta deities is here replaced by dramatic interest and a capture of power in motion. Subsequent sculpture in southern India continues to develop in fluidity, reaching perhaps the zenith of its integration of stillness and movement in the tenth-century image of the dancing Siva, Nataraja, developed in South India under Cola patronage.

From the tenth to the twelfth century, South Asian sculptors evolved such a consummate skill and facility in carving that sculpture during this period spills out of the measured enclosure of niches and dominates the temple surface. The temple as an integral whole projects the impression of the mighty immobile cosmic Mount Meru, which contains the multitudinous, varied activity of the world at its base. The sculpted forms of deities and celestial denizens stand or interact in various fluid postures, expressing the ecstatic repose of transcendental action. In the case of the temples at Orissa and Khajuraho in eastern and central India, respectively, a strong erotic element also finds expression, indicating the prominent presence of Tantric cults. This high achievement of the successful marriage of static soaring temple forms and teeming mobile surfaces marks the final creative outburst of the South Asian tradition in sculpture.

Buddhism disappeared from India by the thirteenth century and gradual Islamic dominance of northern South Asia from the twelfth century inhibited the production of large-scale Hindu temple environments. The Vijayanagara kingdom of the south and other pockets that offered resistance to Muslim conquest managed to continue the tradition until the sixteenth and seventeenth century, but with a progressive diminution of ideational creativity.

Islamic architecture brought a new visual language of domes, arches, and minarets to the South Asian building environment and found expression in mosques, tombs, and forts. Marrying Afghan and Turkish styles with the Indic skill in stone-carving, it left its most prominent marks in the cities of North Central India and to some extent in the Deccan region, from the twelfth to the nineteenth century. Eschewing figurative sculpture due to religious prohibition, it nevertheless gives us the most exquisite carved, inlaid, and latticed surfaces with calligraphy, foliate patterns, and intricate geometric designs. Islamic architecture reached its greatest heights in the sixteenth and seventeenth centuries under the Mughal rule (1526–1857 CE). The gates, halls, pavilions, mosques, and tombs commissioned by the third Mughal Emperor Akbar (1543–1605) at Agra and Fatehpur Sikri can be seen as precursors to the legendary beauty of the Taj Mahal, built by Shah Jehan (1592–1666) in Agra as a tomb for one of his wives, Mumtaz. Placed at the far end of a garden, the Taj's soaring dome and minarets in white marble combined with the majestic simplicity of its design and the perfection of its proportions evoke a supernatural archetype. Close up, its massive white marble surface reveals borders with flowers, leaves, and Koranic calligraphy in colored precious stones, inlaid using a *pietra dura* technique.

After 1857, most of South Asia was brought under the British crown as a colony of Great Britain. The colonial



An Indian vessel made of jade.

period, leading up to the division and political independence of India and Pakistan in 1947, is known for its imperial Victorian architecture, particularly in the major colonial centers of Calcutta, Bombay, Madras, and Delhi. Following independence, both India and Pakistan have entered into the mainstream of a global modernity, where international functional concerns mix with national and regional identity issues in fashioning a contemporary South Asian architecture.

Painting

The earliest remaining examples of painting in South Asia are Buddhist cave murals such as those in the monasteries at Ajanta. Here, two phases of painting, corresponding to the two phases of excavation, may be distinguished, the earlier being from the first century BCE and the later from the fifth century CE. The themes depicted are mainly stories and scenes from the life of the Buddha. The murals are made with mineral colors on a specially plastered surface and, particularly in the later phase, are characterized by hieratic scaling (more important figures are bigger), Buddha and bodhisattvas shown in formal poses and with typical physiognomy, and others depicted more realistically. Elements of three-dimensional modeling and perspective are mixed in with two-dimensional “flat” figuring, to introduce a semblance of realism in representations where narrative interest clearly takes precedence over natural illusion.

EARLY MANUSCRIPTS

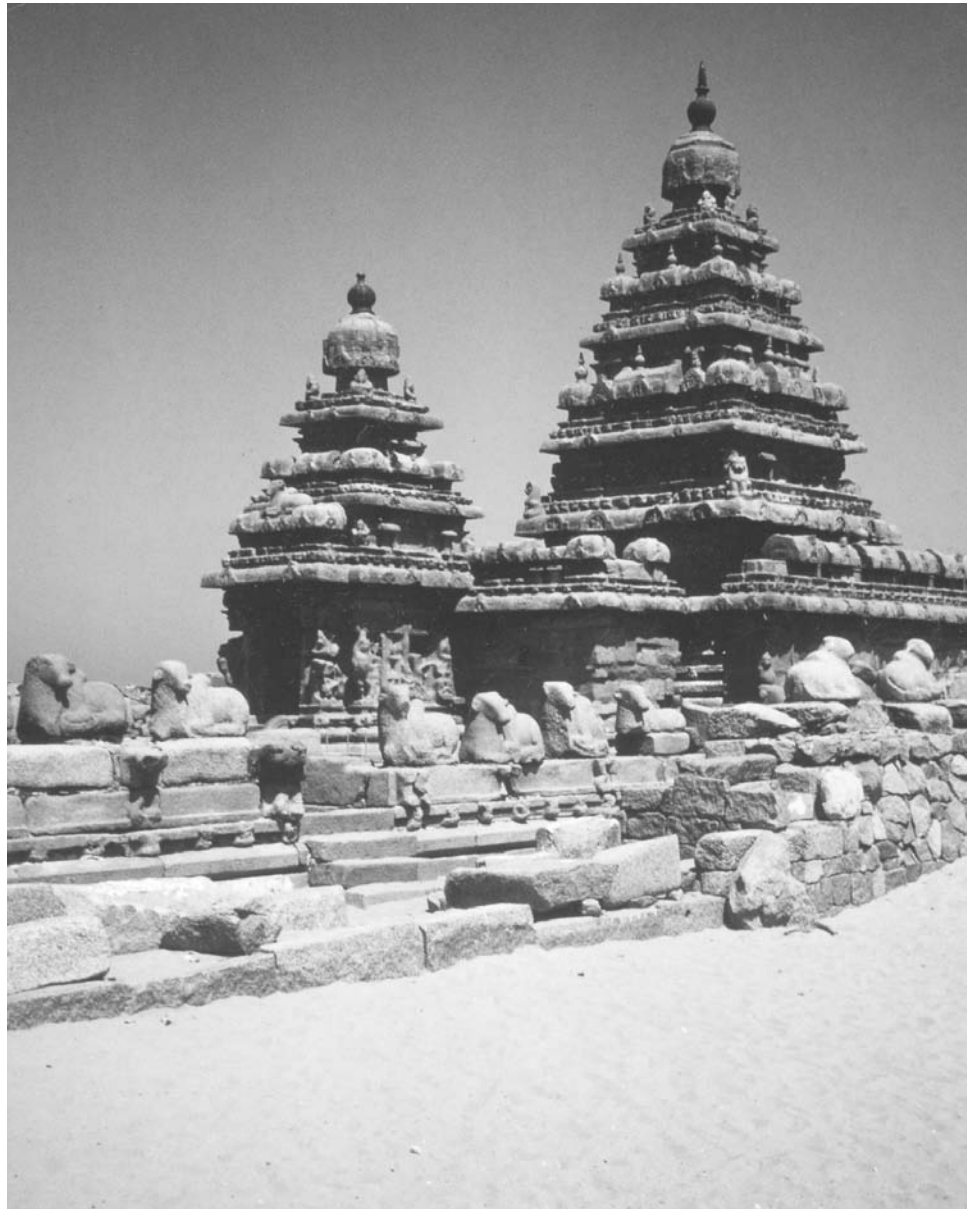
In painting, following Ajanta of the Vakataka period, few other fragmentary murals in cave or temple settings remain. The earliest surviving manuscript paintings are eleventh-century Buddhist and Jain palm-leaf illustrated manuscripts of religious texts. These texts were venerated as sacred objects and offered as religious donations by patrons.

**The Hindu Shore
Temple at Mahabali-
puram, India, which
shows many features
of South Asian
monumental art.**

Extant eleventh- and twelfth-century Buddhist palm-leaf manuscripts come largely from regions in eastern India and often have stock painted scenes from the life of the Buddha on the inner surfaces of the wooden boards that bind the palm leaves and as dividing elements between spaces of text. The images are iconic and seldom directly related to the text. Hieratic scaling and static figural postures executed using a rhythmic outline and filled in with flat opaque mineral colors characterize the painting style.

The Jain manuscripts were mostly produced in the Gujarat region of western India. By the last quarter of the fourteenth century, paper had become the preferred medium for Jain manuscripts, and the elongated palm-leaf format was gradually replaced by a rectangular form more suited to larger illustrations. Jain manuscripts make use of a restricted and bold color scheme and rhythmically outlined, flattened figures, as in the Buddhist tradition. There is no attempt to depict spatial depth. A characteristic of the figures is their invariable presentation in profile with the invisible eye protruded into visibility.

The oldest extant illustrated Hindu manuscripts date to the second half of the fifteenth century and follow the conventions of Jain painting. Hindu myths and epics had by this time become standardized and pervasive in popular South Asian culture, and episodic representations of these themes find expression in these illustrations. From the early sixteenth century, a bold shift appears in this tra-



dition, prioritizing the image over the text. The by-now standard rectangular form of the page is mostly occupied by the pictorial representation, with an abbreviated textual description in the upper margin and the extended text on the obverse of the page. This tradition makes its appearance in Rajasthan and the western Gangetic kingdoms of northern India and is presumed to originate in royal and other wealthy patronage. The contemporaneous rising popularity of medieval Vaishnavism (worship of Vishnu), with its use of an erotic symbology to describe the mystical pastimes of Krishna (Vishnu's most famous incarnation) must have played its part in fueling this production. The incorporation of a Vaishnav mystical context

into literary and courtly amorous narratives characterizes this painting tradition and initiates a thematic stream that continues through the history of South Asian painting. Though these paintings attempt a depiction of spatial depth, they are essentially flat, with stylized figures shown in static profile, making hieratic gestures in starkly simplified color planes. This painterly aesthetic, commonly known as the “Rajput style,” remains a viable South Asian idiom of painting throughout subsequent centuries, reasserting itself in various times and places.

MUGHAL PAINTING, 1526–1857

The sixteenth century also witnessed the hegemonic rulership of the Mughals in northern South Asia, resulting in a new school of painting, known commonly as Mughal painting. The initiation of this school occurred in the mid-sixteenth century during the rulership of the second Mughal emperor, Humayun (reigned 1530–1540, 1555–1556), who brought two master painters from the court of Tabriz, Abdus Samad and Mir Sayyid Ali, to found his atelier at Delhi in 1555. Within a year, Humayun died and was succeeded by his son, Akbar (reigned 1556–1605). Akbar had an abiding passion for the arts of painting and storytelling and quickly built up his father’s atelier to illustrate a large number of Persian and Hindu secular and religious texts. Akbar’s earliest commission was the illustration of the *Tutinama* (Tales of the Parrot). A large number of artists recruited from existing South Asian painting traditions worked under the direction of the Persian masters, resulting in a hybrid style and aesthetic which, by the time of Akbar’s second commission, had developed a distinctive identity. Mixed perspective, structured visibility of interiors, and natural elements such as mountains and trees are taken from Persian prototypes; hieratic patterning, bold coloring, and narrative arrangements are reminiscent of indigenous traditions; uniquely new with the early Mughal painting style were a crowded swirl of highly individualized figure-types laid out in a space divided by forms from nature (such as trees or rocks) to give a sense of depth, a patterned variety of coloring, and a judicious introduction of three-dimensional modeling.

From the mid-sixteenth century, the influence of Renaissance naturalism, introduced into Akbar’s court by Jesuits, began to gain prominence in the works of his atelier. Space and volume are now defined by light and shade. Aerial perspective is introduced, as are atmospheric effects to depict spatial recession.

These techniques continued to gain prominence in paintings from the courts of Akbar’s successors. The Mughal atelier remained as prolific under Akbar’s son, Jahangir (reigned 1605–1627), though the thematic interest shifted from dynamic narrative episodes to carefully attentive portraiture, scenes of psychological interest, and detailed though stylized studies of flowers and animals. A number of superb allegorical portraits of the emperor come to us from this court. Though the Mughal atelier continued during the reign of Jahangir’s son and successor, Shah Jahan (reigned 1628–1658), it seemed to have lost its vitality and inventiveness. The paintings of this period are marked by a courtly stiffness and formalism and lack the boldness of color or composition of either Rajput paintings or earlier Mughal work. The Mughal atelier largely dispersed during the reign of the Islamic puritan Aurangzeb (reigned 1658–1707), son and successor of Shah Jahan.

SEVENTEENTH- AND EIGHTEENTH-CENTURY DEVELOPMENTS

In the Deccan kingdoms of central India, small Islamic states had established themselves since the fourteenth century and developed independent cultural traditions. Among these, the most important were the kingdoms of Golconda and Bijapur, which remained independent until late in the Aurangzeb’s reign. With cultural roots in Persia and Turkey, these kingdoms developed their own painting traditions, known as the “Deccani style,” marked by a rich coloration dominated by lavender, gold, and green, a jeweler’s eye for decorative pattern and mystical or fantastic stylizations.

From Akbar’s time, a number of the Rajput courts came under the suzerainty of the Mughals, developing close courtly liaisons. Mughal stylistic influences began appearing in the paintings of a number of these courts. In the late



seventeenth century, after the dispersal of artists from Aurangzeb's court, further assimilation of Mughal thematic and stylistic idioms continued in the Hindu Rajput states. Here, the earlier predominance of Hindu religious themes is now complemented by formalized portraiture of the maharaja seen in court or in gardens or terraces with attendants, or in equestrian or hunting scenes. However, these scenes and some Mughal stylistic elements were mostly incorporated into flat decorative "Rajput" compositions in courts such as those of Kota and Mewar of this period. The Bikaner paintings of this period, on the other hand, show a much closer affinity to the naturalism of Mughal style combined with the decorative patterning and mystical palette of the Deccan courts.

The Mughal court saw a brief and brilliant revival during the reign of Aurangzeb's grandson, Muhammad Shah (reigned 1719–1748). The idealized moody romanticism of the paintings produced under him, thematizing courtly love and characterized by naturalistic atmospheric effects, carried over once more to inspire two of the finest and most charismatic schools of late Rajput and Pahari painting respectively, those of Kishangarh and Kangra.

In the mid-eighteenth century, a fruitful collaboration between Raja Savant Singh (reigned 1748–1764) of the Rajput state of Kishangarh and the two master artists of his court, Bhavani Das and Nihal Chand, both originally from Delhi, led to the formation of a unique and distinctive style of painting. Extending the moody romanticism of the late Mughal court, Kishangarh painting of this period produced a large corpus of highly stylized depictions of its patron raja and the object of the raja's affection, the court singer Bani Thani, with the two portrayed as Krishna and Krishna's beloved Radha, respectively.

A similar effect, using different means and developing a different and more refined aesthetic, appears also around the mid-eighteenth century in the hill states of Guler, Jasrota, and Kangra, and is attributed to the efforts of two artist brothers, Manaku and Nainsukh (1710–1778), and their students. Nainsukh's work in the court of Raja Balwant Singh of Jasrota (1724–1763) in particular can be said to originate the highly prized late Kan-

gra school. The thematic mainstay of this school, like the school in Kishangarh, is the dalliances of Radha and Krishna. Here the late Mughal romantic figures and style are transformed by a dream-laden tranquil naturalistic backdrop into a languorous intimate amorous moment in the secret wood, where time stands still and the divine couple, stylized using an aesthetic of balanced refinement, savor eternal delight in time-born bodies.

From the mid-eighteenth century, the British presence in South Asia exerted a powerful influence on courtly taste, moving it towards photorealism. The advent of photography itself contributed in no small measure to this change. Indigenous artists trained in earlier courtly styles now adapted their work to imitate the camera. Whereas some of these artists continued serving native patrons, particularly through portraiture, several were employed by the British to record scenes of South Asian life, its landscapes, and its flora and fauna. The work of these artists forms a body known as the Company School.

THE TWENTIETH AND TWENTY-FIRST CENTURIES

At the beginning of the twentieth century, as part of a nationalistic rethinking of identity, the Calcutta artist Abanindranath Tagore and his students deliberately moved away from Western-influenced styles. Known today as the Bengal School, these artists fashioned a distinctive style affiliated with an international antimaterialist movement and Pan-Asianism by integrating elements of Rajput, Mughal, Japanese, and Pre-Raphaelite style. From the second quarter of the twentieth century, international Modernism began increasingly to influence South Asian art, opening up a variety of creative adaptations. Today, the contemporary art scene in South Asia is among the most vibrant and prolific in the world, with increasing numbers of artists making bold forays into individualized modes of expression suited to the social, cultural, and local contexts of the subcontinent.

Debashish Banerji

See also Harappan State and Indus Civilization

Further Reading

- Archer, W. G. (1973). *Indian paintings from the Punjab hills: A survey and history of Pahari miniature painting*. London: Sotheby Parke Bernet.
- Bajpai, K. D. (1997). *Five phases of Indian art*. Jodhpur: Rajasthan-Vidya Prakashan.
- Banerjee, A. C. (1983). *Aspects of Rajput state and society*. New Delhi: Rajesh Publication.
- Beach, M. C. (1992). *The New Cambridge History of India: Mughal and Rajput painting*. Cambridge, UK: Cambridge University Press.
- Brown, P. (1981). *Indian painting under the Mughals, A.D. 1550 to A.D. 1750*. Oxford, UK: Clarendon Press.
- Coomaraswamy, A. K. (1916). *Rajput painting: Being an account of the Hindu paintings of Rajasthan and the Punjab Himalayas from the sixteenth to the nineteenth century, described in their relation to contemporary thought, with texts and translations*. London: Humphrey Milford.
- Coomaraswamy, A. K. (1927). *History of Indian and Indonesian art*. New York: E. Weyhe.
- Craven, R. C., Jr. (1997). *Indian art: A concise history* (Rev. ed). London: Thames & Hudson.
- Craven, R. C., Jr. (Ed.). (1990). *Ramayana: Pahari paintings*. Bombay: Marg Publications.
- Desai, V. N. Painting and politics in seventeenth-century North India, Mewar, Bikaner and the Mughal court. *Art Journal*, 49(4), 370–378.
- Gascoigne, B. (1971). *The great Moghals*. New York: Columbia University Press.
- Goswamy, B. N., & Fischer, E. (1992). *Pahari masters: Court painters of northern India*. Zurich, Switzerland: Artibus Asiae.
- Harle, J. C. (1974). *Gupta sculpture*. Oxford, UK: Clarendon Press.
- Huntington, S. L. (1985). *The art of ancient India: Buddhist, Hindu, Jain*. New York: Weatherhill.
- Kramrisch, S. (1933). *Indian sculpture*. New York: Oxford University Press.
- Mitter, P. (1994). *Art and nationalism in colonial India, 1850-1922: Occidental orientations*. Cambridge, UK: Cambridge University Press.
- Randhawa, M. S., & Bhambri, S. D. (1981). *Basholi paintings of the Rasamanjari*. New Delhi: Abhinav Publications.
- Randhawa, M. S., & Galbraith, J. K. (1968). *Indian painting: The scene, themes, and legends*. Boston: Houghton Mifflin.
- Randhawa, M. S., & Randhawa, D. S. (1980). *Kishangarh painting*. Bombay: Vakils, Feffer & Simons.
- Rowland, B., Jr. (1970). *The art and architecture of India: Buddhist, Hindu, Jain*. Harmondsworth, UK: Penguin.
- Rowland, B., Jr. (1963). *Evolution of the Buddha image*. New York: Asia Society.
- Saraswati, S. K. (1975). *A survey of Indian sculpture*. Calcutta: Munshiram Manoharlal.
- Topsfield, A. (1984). *An introduction to Indian court painting*. London: Victoria and Albert Museum.
- Welch, S. C. (1977). *Imperial Mughal painting*. New York: George Braziller.
- Welch, S. C. (1984). *India: Art and culture, 1300–1900*. New York: The Metropolitan Museum of Art.
- Welch, S. C., & Beach, M. C. (1976). *Gods, thrones, and peacocks: Northern Indian painting from two traditions, fifteenth to nineteenth centuries*. New York: Asia House Gallery.
- Williams, J. G. (1982). *The art of Gupta India: Empire and province*. Princeton, NJ: Princeton University Press.
- Zebrowski, M. (1983). *Deccani painting*. Berkeley and Los Angeles: University of California Press.

Art—Southeast Asia

Southeast Asia has some of the most distinctive and impressive art traditions in the world. From earliest times into the present the countries in mainland and insular Southeast Asia have been centers of artistic innovation and the recipients and transformers of artistic influences from outside. The names *Indochina* and *Indonesia* point to some of the outside influences but they mask a deeper sense of cultural layering, innovation, and invention.

The Earliest Art

Some of the earliest pottery and bronze artifacts in the world have been discovered in small rural villages in northern Thailand. Starting about 3600 BCE, fine decorated pottery was made at sites such as Ban Chiang and Non Nok Tha. The oldest examples from Ban Chiang are a grayish pottery decorated with incised designs, followed in about 1000 BCE by striking beige-colored pots with fine geometric shapes and restrained painted decoration in red ochers. The final phase, lasting until about 250 BCE, includes elaborately shaped vessels with a profusion of painted linear decoration usually forming complex swirls.

The Bronze Age in Southeast Asia begins about 2000 BCE with utilitarian implements found at Non Nok Tha. The discovery of these bronzes makes Southeast Asia one of the first areas in the world in which people mastered the art of shaping bronze. Impressive as this is, large-scale use of bronze in Southeast Asia occurred much later, from about 500 BCE to about 350 BCE. Some magnificent large-scale works distributed over a vast area of mainland



This cave carving is one of many found in Angkor, Cambodia.

and insular Southeast Asia date from that period. This Dong Son culture, so named after the first site unearthed in northern Vietnam, produced, among other objects, decorated socketed axes, elaborate bronze flasks, and, most famously, more than two hundred impressive metal drums. The drums are decorated with linear designs typically including a sun and star pattern at the center of the tympanum surrounded by circling birds and geometric ornaments in concentric rings. Some examples include three-dimensional frogs at the edge of the tympanum. Along the sides long narrow boats with plumed passengers are aligned as if in a procession. The symbolism of heavenly bodies and water suggests that the drums had special religious significance.

Bronzes have been found as far as Lake Sentani in West Papua, Indonesia. This wide distribution, combined with

the great diversity of styles throughout the Indonesian archipelago, indicates a trade network in these artifacts prior to the formal entry of Buddhist and Hindu art from India in the ninth century CE. There were probably powerful rulers who could command the production and import of valuable and elaborate artifacts. Roman coins and early Indian items indicate that trade had already begun with the world outside of Southeast Asia.

Indian Influences

The earliest contacts between western Southeast Asia, Sri Lanka, and India were most likely in the form of trade carried forth by merchants originating in both India and the islands of Southeast Asia. The Chinese were also part of this early commerce and, also as Buddhist and Hindu pilgrims, may have played an important role in diffusing these religious beliefs. It is uncertain precisely when this trade began but the earliest Indian and Chinese accounts vaguely refer to Indianized sites in Funan in the third century in Cambodia, and the Srivijaya dynasty centering on Palembang in South Sumatra. Large quantities of Tang dynasty ceramics date the Sumatran sites to about the seventh to the ninth centuries. It appears that no invasion or colonization from India ever happened. Southeast Asian rulers transformed social and religious concepts into practical models for their own society.

INDONESIA

Metropolitan Buddhist and Hindu art from India is evident in a major way beginning about 800 in the Dieng plateau of Central Java with a series of elaborate stone religious buildings. The earliest, built under the Sailendra rulers (778–864), are Buddhist and include the most impressive monument of ancient Indonesia, the great stupa of Borobudur.

A stupa is intended to be a monument to the Buddha. Often it is a giant reliquary containing some part of the body of the Buddha within its structure. It is also intended as a cosmic model, incorporating the cardinal directions and the idea of the rotation of the universe around an axis. The sculpture on a stupa takes the viewer

through the stages of enlightenment, beginning at the level of the everyday world, moving through the story of the life of the Buddha, and then beyond into the realms of nirvana. The stupa at Borobudur does all of this, but in a new design and on a massive scale. Built of approximately 57,000 cubic meters of stone, it has been called the largest unified work of art in the world.

Stairways lead up to the rectangular lower levels of the monument. At each tier one turns left and walks past subtly carved relief panels depicting the life of the Buddha amplified with details drawn from daily life in ninth-century Java. There are carvings of large outrigger sailing vessels and court ladies all done in a style derived from fifth-century Indian traditions but modified in a uniquely Indonesian way. Figures have a rounded sensuality with delicate features and gestures. As one goes higher in the monument there are more images of seated Buddhas, until at the highest rectangular levels there are niches with three-dimensional seated Buddha figures in them. At the upper levels rectangular tiers give way to circular tiers, and relief sculptures are replaced by open bell-shaped stupa forms. Free-standing Buddha images can be seen inside through the openwork of these smaller stupas. The pinnacle of the monument is a solid dome-shaped stupa that marks the center and axis of Borobudur.

Not far from Borobudur is the site of the finest Hindu monument in Indonesia. Buddhist and Hindu dynasties competed and succeeded each other on the basis of trade and political intrigue rather than religion. In fact, religious dynastic labels are based upon the emphasis they placed upon a single religion rather than the exclusion of the other. Often sites and statues blend both Hindu and Buddhist concepts and iconography. Prambanan, also called the Lara Jonggrang complex, is reputed to have been constructed in 856 by King Ratu Baka. It consists of three tall temples, each one dedicated to one of the three major Hindu deities. The largest and central *candi* (pronounced “chandi”), or temple, is dedicated to Siva. Flanking it are smaller temples dedicated to Vishnu and Brahma. The high temple symbolizes the sacred mountain where Siva lives with his consort Par-

vati. Although obviously derived from Indian sources, the architecture of the temple complex is not a direct copy but a reinterpretation. As at Borobudur, the sculpture offers subtle variations based upon Indian sources but with gentler poses and facial expressions. The reliefs on the temples illustrate the two greatest Hindu epics, the *Ramayana* and *Mahabharata*. An interesting detail in one relief shows a building rendered in linear perspective—more than five hundred years earlier than that technique was codified in Italy. Smaller temples face the three major temples. These are dedicated to the mounts of the three deities; Nandi, the bull whom Siva rides, Garuda, the bird that Vishnu rides, and Angsa, the goose for Brahma.

As Islam began its move into Indonesia in the thirteenth century, the Hindu-Buddhist rulers move eastward on the island of Java, establishing the Singasari (1272–1293) and Majapahit (1293–1520) dynasties. There they continued to create great temples such as Candi Singasari and Candi Panataran. Eventually Islam became the dominant religion on Java, and the Hindu-Buddhist rulers moved onto the island of Bali. Despite the conversion to Islam, Hindu epics still play a vital role in the court and everyday culture in Java and elsewhere in Indonesia. Most famous are the shadow puppet (*wayang kulit*) performances and masked dances with gamelan orchestra and singing of the Hindu epic, the *Ramayana*. Bali today is the only Hindu area outside of India and Indian diaspora communities.

On Bali art and religion merge seamlessly, and in some way or another nearly everybody engages in the production of art, music, and dance. The island is dotted with temples, shrines, and palaces. The large active volcano Gunung Agung is sacred to the inhabitants, and rituals performed in its main temple, Pura Besakih, are performed to maintain the order of the universe. Like Prambanan, Besakih is dedicated to the three major Hindu deities, but the architecture is quite different. A massive stone stairway leads up the slope of the mountain, and on the terraces above there are thatched wooden buildings somewhat resembling pagodas that represent Mount

*Be extremely subtle, even to the point of formlessness.
Be extremely mysterious, even to the point of soundlessness.
Thereby you can be the director of the opponent's fate.* • SUN TZU

Meru, the mountain of the gods at the center of the universe in Hindu cosmology.

CAMBODIA

In Cambodia, the Khmer empire, which began its rise in the seventh century and was at its peak in the ninth through twelfth centuries, fashioned equally impressive arts that combined Hindu and Buddhist influences. One of the most remarkable world monuments is Angkor Wat. Begun around 1113 by the ruler Suryavarman II (died c. 1150) and completed around 1250, Angkor Wat is a city of art. It includes a giant architectural complex surrounded by moats with bridges and sculpted buildings and towers. The relief sculptures are in a unique Khmer style portraying a range of subjects from the Hindu epics to battles and delicate dancing maidens. The faces are delicately carved with squarish chins and rather thick, broad lips that sometimes have bow-shaped mustaches. The eyebrows flow across the ridge above the nose, also forming the double curve of an archer's bow. The figures have a subtle meditative look that is enhanced by the even patterns of the hair. Many of the reliefs that show action utilize a great number of figures that create rhythmic patterns throughout compositions of rhythmically repeating curves. The site is set amidst large rectangular artificial lakes that provide water for the planting season.

MYANMAR (BURMA)

The great Buddhist movements of Burma originated in 1056 under King Anawratha in the fertile Irawaddy River basin extending to the Salween River delta. From its beginnings, Buddhist art in Myanmar (Burma) incorporated an indigenous belief in spirits called Nats. Thirty-six Nats form the subject of much Burmese art and Buddha is considered the thirty-seventh. Hence Buddhist temples are as much Nat-houses as they are dedicated to Buddhism. The earliest large-scale Buddhist site is the city of Pagan. This city, a tremendously impressive collection of hundreds of temples, shows the evolution of their architectural tradition from Indian sources to a distinctive Burmese style. Perhaps the most impressive monument is

the giant Schwe Dagon stupa in the city of Rangoon. Started in the fourteenth century by the ruler Binnya U as a 22-meter high monument, it was modified many times until its reconstruction from 1763–1776 after an earthquake when it reached its present height of 99.4 meters. The white, bell-shaped form of the stucco and brick monument closely resembles prototypes in Sri Lanka particularly at the fifth century site of Annuradhapura. It is surrounded by numerous shrines resembling Chinese pagodas and a panoply of Buddhist sculpture.

THAILAND

After contact with the Burmese kingdom of Pagan, the tribal peoples of Thailand adopted Buddhism. The cities of Chiangmai in the north and Ayuthia in the south became early centers for the spread of the new religion. From its beginnings, the southern part of Thailand was dominated by Cambodian Khmer civilization. However in 1287, when the Mongols invaded Pagan, three powerful Thai chiefdoms combined to form the kingdom of Sukhodaya and spread Buddhism to all parts of Thailand. The cannons of Theravada Buddhism prevalent in Thailand fixed the sculpture style, making it difficult to chronicle changes over time but also making it easy to identify Thai Buddhist imagery with its slender forms and tall spire-like head protuberances.

When the capital of Thailand was moved to Bangkok in 1767, numerous buildings were constructed as very ornate versions of wooden architecture in other parts of southeast Asia, particularly Burma. The Temple of the Emerald Buddha in the royal palace compound is typical with its steep roofs with dragon finials at the gables. The gables emerge in sections from within each other as they do in Burma and other parts of southeast Asia.

Although smaller than Angkor Wat, nearby Angkor Thom is also very remarkable. The main structure, called the Bayon, has high towers at the periphery of the main buildings. The sides of the towers have giant faces carved on them that are thought to represent the ruler Jayavarman VII (c. 1120–c. 1215), the monarch who commanded the construction of the site. The serenely stylized

portraits blur the distinction between rulers and gods. The idea is that Jayavarman VII is a *devaraja*, a king who has the attributes of a god.

Chinese Influences in Vietnam

Contemporary with Angkor, the kingdom of Champa flourished in the south of Vietnam, an area then called Annam. Their temples consisted of tall tower structures with flame-like arches of the doorways. Their sculpture was especially distinctive with very square faces, very thick broad lips and exaggerated bow-shaped eyebrows that at times extended across the forehead as a rope-like ridge. Halos typically had foliage that resembled a mass of worms.

Tribal Arts

In the remote parts of Southeast Asia, the highlands of mainland Southeast Asia and distant islands of Indonesia, there are many tribal groups who have either resisted or missed the larger metropolitan influences coming from the west and north. Here one finds some extraordinary and unique art traditions that have only recently caught the attention of the outside world. In the highlands of mainland Southeast Asia ethnic groups such as the Hmong, the Ahka, and the Yao produce intricate embroidered and dyed costumes and spectacular jewelry, particularly in silver.

Indonesia is particularly rich in these cultures. On the island of Nias, off the west coast of Sumatra, the inhabitants build large and impressive houses. One royal palace is 20 meters high, supported underneath by over 100 gigantic pillars. There are also elaborate megalithic monuments in the villages that memorialize the dead and commemorate sumptuous feasts that raise the status of the rulers. In Nias, and many other parts of tribal Southeast Asia such as Sumba, islands in South Maluku, and among the Batak peoples of Sumatra and the Toraja peoples of Sulawesi, elaborate gold jewelry celebrates status and is rich in symbolic value.

The Toraja people on the island of Sulawesi are also known for their fine architecture, but their highest artis-



“Re Lua” by celebrated Vietnamese artist Nguyen Phan Chanh (1892–1984).

tic achievement centers around their funeral rites. To memorialize a high-ranking chief an enormous banquet is prepared as hundreds of people sing and dance in their finest attire and jewelry. Special houses are constructed for the guests and to serve the ceremonial purposes of the funeral. Life-sized wooden effigies called *tautau* are placed in grottos as testimonials to the fame of the ancestors.

Modern Art

Time-honored arts still flourish throughout Southeast Asia. Fine textiles, jewelry, traditional weaponry, and architecture can still be found in great abundance. However, as in cultures around the world, long-established ways of life and their accompanying artistic traditions are changing and to some extent vanishing under contemporary economic, religious, political, and technological influences. In much of Southeast Asia newer forms of contemporary art are being created that express the individual ideas of the artists and contemporary social and

political conditions. Today, not only Southeast Asia's traditional art, but also the art created by its contemporary artists, particularly those from the Philippines, Indonesia, and Malaysia, can be now seen in the museums and galleries of New York, London, and Paris.

Jerome Feldman

See also Khmer Kingdom; Srivijaya

Further Reading

- Barbier, J. P., & Newton, D. (1988). *Islands and ancestors*. New York: The Metropolitan Museum of Art.
- Bellwood, P. (1979). *Man's conquest of the Pacific: The prehistory of Southeast Asia and Oceania*. New York: Oxford University Press.
- Bellwood, P. (1997). *Prehistory of the Indo-Malaysian archipelago*. Honolulu: University of Hawaii Press.
- Bernet Kempers, A. J. (1959). *Ancient Indonesian art*. Amsterdam: Tropenmuseum.
- Bulbeck, D. F., & Barnard, N. (2000). *Ancient Chinese and Southeast Asian Bronze Age cultures*. Taipei, Taiwan: Southern Materials Center.
- Feldman, J. (1994). *Arc of the ancestors*. Los Angeles: Fowler Museum.
- Fontein, J. (1990). *The sculpture of Indonesia*. New York, Harry N. Abrams.
- Grosslier, B. P. (1962). *The art of Indochina*. New York: Crown.
- Higham, C. (1996). *The Bronze Age of Southeast Asia*. Cambridge, UK: Cambridge University Press.
- Holt, C. (1967). *Art in Indonesia*. Ithaca, NY: Cornell University Press.
- Jessup, H. (1990). *Court arts of Indonesia*. New York: Harry N. Abrams.
- Kandahjaya, H. (1995). *The master key for reading Borobudur symbolism*. Bandung, Indonesia: Yayasan Penerbit Karaniya.
- Miksik, J. (1990). *Borobudur: Golden tales of the Buddha*. Boston: Shambhala.
- Rawson, P. (1967). *The art of Southeast Asia*. New York: Thames and Hudson.
- Soebadio, H. (1992). *Art of Indonesia: From the collections of the national museum of the Republic of Indonesia*. New York: Vendome Press.
- Somers Heidhues, M. (2000). *Southeast Asia: A concise history*. New York: Thames and Hudson.
- Taylor, P., & Aragon, L. (1991). *Beyond the Java Sea*. Washington, DC: Smithsonian Institution.
- Wagner, F. (1959). *The art of Indonesia*. New York: Crown.
- White, J. C. (1982). *Ban Chiang: Discovery of a lost Bronze Age*. Philadelphia: University of Pennsylvania Press.

centers of artistic development were focused in the cities of Mesopotamia, Anatolia, and the west Mediterranean littoral. The Persian and Helleno-Roman empires, including Byzantium, that ruled various parts of West Asia from around 550 BCE until 650 CE and beyond introduced artistic traditions with a broader range and wider geographical span. Finally, after the seventh century CE, Islamic art gradually became the dominant visual culture in West Asia, although other traditions continued as well.

Neolithic Art

Among the earliest forms of art surviving from West Asia are those associated with Neolithic settlements. Çatal Höyük on the south central Anatolian plain was settled from around 6500 to 5650 BCE, and excavations there have uncovered architecture, sculpture, beautifully decorated pottery, wall paintings, and the remains of what appears to have been a vibrant weaving tradition. The Ubaid culture of Mesopotamia, which flourished after 4300 BCE, appears to have provided a foundation for the later art of the Sumerians.

Early Mesopotamian Art

Due largely to twentieth-century excavations and scholarship, we now know of the artistic accomplishments of the great city-states of Mesopotamia, beginning with the Sumerian city of Kish, whose earliest inscriptions can be dated to around 2600 BCE, followed in later Sumerian times by Lagash, seat of the Sumerian ruler Gudea around 2050 BCE, and Ur, whose excavation has yielded remarkable royal and priestly objects, as well as a giant ziggurat constructed around 2100 BCE. In 2334 BCE the Akkadian king Sargon built a new empire, with Nineveh as its political and cultural capital, before falling to a Sumerian resurgence. The most remarkable surviving artifact from the period is a famous copper head of a ruler, in the Iraq Museum in Baghdad. Subsequently the Babylonian civilization flourished; under its greatest ruler, the lawgiver Hammurabi (d. 1750 BCE), sculptors created notable monuments. Babylonian dominance bowed in turn to the Assyrians, under whom artistic production reached new heights; their palace city of

Art—West Asia

West Asia has a long and complex artistic tradition, in which indigenous forms of visual expression have been subjected again and again to new influences coming from both east and west. In early times the main



Khorsabad (c. 701 BCE) and later their reconstruction of Babylon, whose celebrated Ishtar gate (c. 575 BCE) is now located in Pergamon Museum in Berlin, were major centers of artistic activity in all media. Assyrian relief sculptures from Nineveh and Nimrud are now dispersed among museums worldwide.

In Anatolia, numerous civilizations with distinctive artistic traditions flourished in the two millennia before the common era. Among were the Hittites, whose capital of Hattusas has yielded up remarkable stone and metal objects, the best of which are in the Museum of Anatolian Civilizations in Ankara. Urartians, Lydians, and Phrygians, among others, left their mark on the history of material culture in Anatolia, creating fortified cities with masonry walls and furnishing their courts with beautiful objects and well-crafted stone buildings.

The Persian Artistic Tradition

The Achaemenid Persian empire (550–330 BCE), followed by Alexander of Macedon (356–323 BCE) and the Seleucids (312–64 BCE), the Arsacids, (247 BCE–224 CE), and the Sasanids (224/228–651 CE) created a continuing artistic tradition that in some ways can be traced in an unbroken line from the works produced in such great early centers as Persepolis, Susa, and Bisitun down to the art of the present day. The palace of Darius I at Persepolis (c. 500 BCE), with its huge, fluted columns and dramatic reliefs of royal ceremonies, gives us an idea of the pomp and majesty of Achaemenid court ceremony and sumptuary arts. Sasanid brick architecture was enormous in scale, as the ruins of the palace of Shapur I (250 CE) at Ctesiphon, with its huge catenary vault, suggest.



The Hagia Sophia in Istanbul, known in Turkey as Ayasofya. Its construction started in 532 CE by Emperor Justinian I and was completed in 537. It was designed to be the largest and most impressive church of that time. It was later taken over by the Muslim rulers and converted to a mosque.

Sasanid architectural and sculptural remains at Sarvistan, Taq-i Bustan, and Nakhsh-e Rostam near Persepolis, and their iconography of Sasanid kings as warriors, hunters, and lawgivers, attest to the political importance of art under the Sasanians. Numerous objects in precious metals likewise demonstrate the rich Sasanid royal iconography, while Sasanid silk weaving was in its time the epitome of beauty, luxury, and technical virtuosity in both east and west.

Greek, Roman, and Byzantine Art in Anatolia

The Hellenic colonizers in Ionia spread the Hellenic visual culture to much of West Asia; like Greek philosophy, much of Greek art appears to have taken form in the Ionian colonies. The succession of Greek classical architectural orders—Doric, Ionic, and Corinthian—and the full repertoire of classical and Hellenistic art is reflected in the excavations of Anatolian cities, from early sites such as Assos and Priene, to later Helleno-Roman sites such as Ephesus (whose temple of Artemis was one of the seven wonders of the ancient world), Halicarnassus (site of another of the seven wonders), and Pergamon, whose magnificent Altar of Zeus (c. 180 BCE) is now in Berlin. Both in the realms of architecture and sculpture, Ionia influenced the art of mainland Greece, and its great temples were far more splendid, and constructed on a much larger scale, than most of those of mainland Greece.

Under Roman dominance westernmost Asia underwent impressive urban expansion, and prosperity led to massive investment in art and architecture. The Romans spread the Helleno-Roman style to Syria and Palestine as well as to southern Anatolia and Egypt, and cities such as Palmyra, Baalbek, and Roman Ephesus display today the most impressive remains of the art and architecture of the ancient world. The Helleno-Roman cultural sphere



Mosaic from Khirbat al-Mafjar, commonly called Hisham's Palace, near Jericho in the Jordan River valley. This is an eighth century CE palace built by Umayyad caliphs and the art reflects local Byzantine traditions, showing Muslim use of figurative art in non-religious buildings.

encompassed indigenous peoples as well. Among these, perhaps the most famous were the Arab Nabataeans, whose great fourth-century BCE city of Petra, with its rock-cut monuments in Hellenistic style, demonstrates the pervasiveness of the classical artistic tradition. Archaeological remains from this period are found elsewhere as well, as far south as the Arabian peninsula.

The establishment in the early fourth century CE of the capital of the eastern Roman empire at Constantinople was instrumental in the development of a new Christian artistic style in West Asia, especially in Anatolia and greater Syria. Drawing heavily on the technical and stylistic legacy of Rome, including the media of mosaic and classical architectural design, the Byzantine artistic style evolved from late classicism into the Middle Byzantine style by the ninth and tenth centuries. Roman and Byzantine engineering advances, such as the barrel and groin vaults and the spherical pendentive, greatly expanded

possibilities for architectural interiors; the six-domed early Byzantine church of St. John at Ephesus (c. 525) and the famous Hagia Sophia in Istanbul (c. 537) exploited the new mathematical engineering. Byzantine Syria and Palestine saw the building of such monuments as the monastery of Simeon Stylites (c. 490) and the sixth-century structures associated with the Holy Sepulchre in Jerusalem. Around the same time the Armenian states in eastern and later in southern Anatolia began a centuries-long development of their own artistic tradition of exquisite cut-stone buildings and sculpture, as well as distinctive traditions of wall painting and manuscript painting. The Church of the Holy Cross at Achtamar, from the early tenth century, is perhaps the most famous of many sculpture-covered Armenian masonry churches of the Middle Ages, and the ruins of the Bagratid capital of Ani, ravaged by an earthquake in the eleventh century, still impress visitors to this day.

Early Islam in West Asia

With the explosive spreading of Islam from the Arabian peninsula into the Middle East, North Africa, and Central Asia following the death of the Prophet Muhammad in 631, the arts of West Asia underwent major changes. Unlike the cultures of the Byzantine and Sasanid empires, which had deeply rooted traditions of artistic images of both kings and religious figures, Islamic culture reflected the Prophet's deep distrust of figural art as potentially idolatrous and symbolic of luxury. The art of West Asia after the coming of Islam, as one might expect, therefore represents a syncretism of preexisting traditions adapted to new needs and beliefs. The first great Islamic building, the Dome of the Rock in Jerusalem (c. 680), reflects centralized church plans of Syria in its form and uses the Roman-Byzantine technique of mosaic in its decoration. The Great Mosque of Damascus, constructed in the early eighth century under the Umayyad dynasty (661–750), is in fact a recycled Christian edifice that was in turn converted from a Roman temple precinct. Scorning human and animal images in its public and religious art, early Islamic civilization developed the repertoire of Arabic calligraphy associated with the Qur'an, together with new adaptations of late Roman vegetal, floral, and geometric ornamentation that eventually took on the distinctive Islamic forms we today sometimes refer to as arabesque.

At the same time, in their private rural hunting lodges and urban palaces, the new rulers of the Islamic polity quietly adopted the sumptuous luxury arts and the court iconography of the Sasanid and Byzantine empires. Early eighth-century desert palaces in Syria were covered with mosaics and paintings, in some cases even including depictions of the hunt, genre scenes, and depictions of nude women as entertainers in the Islamic version of the Roman baths. The fall of the Umayyads to the Abbasids (749/750–1258), who moved the capital from Damascus to Baghdad, led to a period of artistic splendor chronicled in the *Arabian Nights*. The shift of the political center of gravity to Baghdad in the east also intensified the Persian cultural impact on the emerging Islamic style. At the same time, the importation of Turkic slave soldiers from Central Asia and trade with Tang China

over the Silk Roads opened the art of West Asia to influences from the north and east as well.

Eastern Invasions and Art of the Later Islamic Empires

Beginning with the arrival of the Seljuk Turks in the eleventh century, West Asia was subject to periodic waves of invasion from the east. The Mongols in the thirteenth century, the Timurids in the late fourteenth century, and the Afghans in the eighteenth century all brought a mixture of destruction and renewal to the art of West Asia. At the same time, east-west contacts developed through the Crusades (beginning in 1095 and occurring periodically through 1291) further enriched both the development and the dissemination of Islamic art. Islamic media such as enameled glass, inlaid metalwork, and the ubiquitous knotted-pile carpet were traded and esteemed in Europe. By the second half of the fifteenth century, the art of West Asia had developed a truly international Islamic style found in Timurid, Uzbek, Turkmen, and Ottoman realms, manifested in the media of architectural decoration, arts of the book, and luxury arts. From Samarqand to Istanbul in the north, and with reflections in the Mamluk art of Cairo and Damascus in the south, this international Islamic style flourished under court patronage. After 1500, the Islamic art of West Asia was dominated by two great court styles, those centered in Ottoman Istanbul and those centered in Tabriz, Qazvin, and Esfahan, the successive artistic capitals of the Safavid empire (1501–1722/1736). Safavid Esfahan was a planned city that took form during the reign of Shah 'Abbas I (reigned 1588–1629). Among the great artistic personalities of the age were the Ottoman architect Sinan (1489–1588), whose greatest masterpiece was the mosque of Selim II in Edirne (c. 1572), and the Safavid court painters Sultan Muhammad (flourished 1520–1540) and Reza 'Abbasi (flourished 1590–1635).

Later Art in West Asia

Artistic development in West Asia from the eighteenth through the twentieth centuries was subjected to the effects of both eastern invasions and Western culture and commerce. European influence appears in Ottoman and



Safavid painting as early as the seventeenth century, and the interplay between revivals of traditional styles and European cultural incursions continues to the present day. The eighteenth and early nineteenth centuries constitute a great age of calligraphy in the Ottoman empire, and nineteenth-century Iranian art under the Qajars (1794–1925) led to many interesting innovations, especially in painting. In the twentieth century, traditional artistic forms were revived while simultaneously West Asian artists began to achieve reputations working in international techniques and media in architecture, easel painting, and sculpture; many of the twenty-first century's most prominent West Asian artists attempt to achieve a fusion of Islamic tradition and modern genres and techniques.

Walter B. Denny

See also Assyrian Empire; Babylon; Mesopotamia; Persian Empire; Sumerian Society

Further Reading

- Blair, S., & Bloom, J. (1994). *Islamic art and architecture, 1250–1800*. New Haven, CT: Yale University Press.
- Ettinghausen, R., Grabar, O., & Jenkins-Madina, M. (2001). *Islamic art and architecture, 650–1250*. New Haven, CT: Yale University Press.
- Grabar, O. (1987). *The formation of Islamic art* (Rev. and enlarged ed.). New Haven, CT: Yale University Press.
- Lloyd, S. (1969). *The art of the ancient Near East*. New York: Oxford University Press.
- Mellaart, J. (1965). *Earliest civilizations of the Near East*. New York: McGraw Hill.
- Pollitt, J. (1986). *Art in the Hellenistic age*. New York: Cambridge University Press.
- Porada, E., & Dyson, R. (1969). *The art of ancient Iran: Pre-Islamic cultures*. New York: Greystone.
- Roaf, M. (1990). *Cultural atlas of Mesopotamia and the ancient Near East*. New York: Facts on File.

Art, Paleolithic

Paleolithic art provides direct insights into the social, mental, and aesthetic aspects of early hunter-gatherer societies, but the ways these messages are understood in the present differ with the changing paradigms of archaeological and anthropological research. Engraved or

carved objects (mobile art) were discovered in 1835 in France and engravings and paintings in caves (parietal art) in 1879 in Spain. However, given the period's evolutionistic presumptions about "primitive man," acknowledgment of both sorts of art by the scientific community followed only several decades later. The intellectual atmosphere of the late nineteenth and early twentieth centuries had been influenced by the belief in art for art's sake on the one hand and by ethnological evidence gathered from overseas colonies on the other. Therefore, the first interpretations focused simply on the role of human creativity or were based on random use of ethnological parallels (hunting magic, taboo, initiation rituals). During the twentieth century, these approaches were submitted to positivist criticism and replaced by various structuralist models. Because the positivists criticized the fact that archaeology and ethnology compared societies from incomparable historical and environmental contexts, the structuralists aimed to build their models exclusively on basis of the empirical analysis of archaeological evidence. In the second half of the century, the use of scientific methods introduced microscopic analysis of art objects, revealing more technological details about this art and about the relationships among the elements depicted in it, and suggesting new interpretations, such as the use of art objects as calendars. Various theories during the later twentieth century introduced a more scientific and systematic basis to the application of ethnoarchaeology and psychology (including the study of altered states of mind, such as those related to drugs and shamanism). The actual research of this period focused on contextual studies of art and symbolism as an integral part of complex social and psychological systems of the past. Specifically, the role of symbols in human communication and information exchange and storage was emphasized. Functionalist approaches to symbols even led some researchers to reject the term *art* in prehistoric contexts.

Origin of Symbolism and Art

The origin of symbolism is in fact a technological process where features from the external worlds are adapted and

organized into mental, verbal, and artistic structures, which, by means of analogy, may be called "domestication of features." Art—that is, the communicating by means of words, gestures, or objects—with its capacity to express and conserve meanings, lends a more permanent character to the information transmitted. Definition of time and space by a given society seems to be a precondition if the message is meant to be conserved for a longer time, because it creates the dimensions in which the symbols may act in the present as in the future. Art is associated with anatomically modern humans, with the present-day human form emerging about 160,000 to 200,000 years ago, during the Middle Paleolithic. However, modern modes of thought and behavior, as reflected in symbolism and art, are not documented archaeologically before the Early Upper Paleolithic, about 40,000 to 35,000 years ago, and rarely beyond the boundaries of the European/North Asian geographic zone. This suggests that the nature of symbolism was not primarily biological, but rather that it was a later invention whose origins were social and psychological.

Several atypical objects (that is, those that, morphologically, may recall sculptures; as well as groups of regularly ordered or patterned lines known as "regular engravings") from the Lower or Middle Paleolithic that may have possessed a symbolic meaning (Berekhat Ram in Israel, Tan-Tar in Morocco, Bilzingsleben in Germany, Tata in Hungary) have prompted current attempts to define a hypothetical "prefigurative" or "proto-art" period. Similar discussions center on mobile art and early rock-art sites from Africa (the engraved ocher at Blombos Cave in South Africa), Australia, and South America.

As for western Europe, the chronological schemes for classic Upper Paleolithic parietal art between 35,000 and 10,000 years ago by Henri Breuil (1952) and, André Leroi-Gourhan (1965) were based on a formal development from more "primitive" (static, naive) to more "developed" (dynamic, complex, realistic) forms and styles. The recent introduction of direct radiocarbon dating of even small amounts of black coloration suggests that even if stylistic variability occurs from period to period the art in general, Paleolithic art has been perfect in terms of both

technique and form from the very beginning (as demonstrated by paintings in the Chauvet cave). From this perspective, the emergence of art, in its complex form, seems to have occurred rapidly.

EARLY UPPER PALEOLITHIC (38,000 TO 30,000 YEARS AGO)

The emergence of items of body decoration is correlated in time and space with the Eurasian Early Upper Paleolithic (the Chatelperronian and Aurignacian cultures), but figurative images appear only in the Aurignacian. Aurignacian art appears in three forms: parietal cave art (the Chauvet Cave in France); engravings in stone slabs (La Ferrassie, Blanchard, and Castanet, all in France), plus possibly paintings on stone slabs (northern Italy); and animal and human figurines carved of ivory and stone (Vogelherd, Geissenklösterle, Hohle Fels, and Hohlenstein, all in Germany, and Stratzing in Austria).

MIDDLE UPPER PALEOLITHIC (30,000 TO 20,000 YEARS AGO)

Several caves with parietal art in France (Pech Merle, Cognac, Cussac, Gargas, Arcy-sur-Cure) as well as rock art in the open air in the Coa valley in Portugal (Fariseu) have recently been dated to the Gravettian by means of radiocarbon and stratigraphy. However, the most complex, and the most typical of this period, are the assemblages of Gravettian mobile art, made of ivory, bone, soft stones, and ceramics, that come from open-air settings (Predmostí, Dolni Vestonice, Pavlov, all in the Czech Republic; Kostenki, Avdeyev, Gagarino, all in Russia). In central Europe, the earlier Gravettian—the Pavlovian—is characterized by complexity of materials, techniques and forms (animals, females, and males—the later being generally rare in Paleolithic art—as well as stylized designs depicting geometric patterns, simplified animal and human figures, or sexual organs). The later Gravettian—the Willendorf-Kostenkian—of the same area provided only individual female figurines (Willendorf, Petrkovice, and Moravany) or a male figure (the Brno 2 burial). In eastern Europe, on the other hand, even though art and decorative objects are recorded early, the formation

of settlements that left behind evidence of complex art did not occur before the Kostenkian stage. In Italy, the majority of the mobile art objects, usually from burial sites (Grimaldi), also date to the later Gravettian. The typical Venus figurines form a pan-European horizon shortly preceding global changes related to the Last Glacial Maximum around 20,000 years ago as evidence for long-distance alliance networks during this particular time-period.

LATE UPPER PALEOLITHIC (20,000 TO 10,000 YEARS AGO)

After the Last Glacial Maximum, cultural development in Europe splits between the East and West. In the East, Epigravettian advances conserved and further developed the geometric tradition of Gravettian mobile art (Mezin and Mezhirich in the Ukraine), and enriched it by parietal cave art (the Kapovaya and Ignatievskaya Caves in Russia). Western Europe saw the formation of a more realistic Magdalenian art, with cave sites painted or engraved in various styles (Lascaux, Les Combarelles, Font de Gaume, Niaux, all in France; Altamira, Castillo, Tito Bustillo, La Garma, all in Spain). Mobile Magdalenian art provides a variety of decorated antler tools and weapons (spear-throwers, “*batons-de-commandement*,” points, harpoons) and engraved stone slabs. Whereas the parietal art is limited to the classical Franco-Cantabrian zone (i.e., northern Spain and southwest France) mobile Magdalenian art also spread to central Europe.

After the Magdalenian, Late Paleolithic and Mesolithic mobile art shows a remarkable reduction in both quantity and variability. At around the same time, realistic rock art created by late hunter-gatherers and early pastoralists in open air and under rock shelters emerges in various parts of the world (the Sahara and the Mediterranean, northern Scandinavia, northern Asia), and initiates a world tradition of rock art that continues to later prehistoric and early historic times.

Spatial and Temporal Relationships

Recent contextual research focuses on how art sites are localized in terms of landscape and of the individual

images within a site. Certain deep-cave sites of western Europe are specialized sites of artistic creativity and presumably of rituals, clearly separated from living areas. Some are located in large underground spaces, possibly places of human aggregation (Altamira, Niaux), but some images are in small cavities difficult to access (Pergouset). In all cases the entrances were hidden, and the cave art is unlikely to have been exhibited to “the public.” The open-air settlements of central and eastern Europe do not provide such evidence for the spatial separation of “sacred” and “profane” life. Here, the occurrence of ceramic or siltstone figurines and fragments, the most typical examples, is correlated with the central settled areas, around hearths and, presumably, inside dwellings.

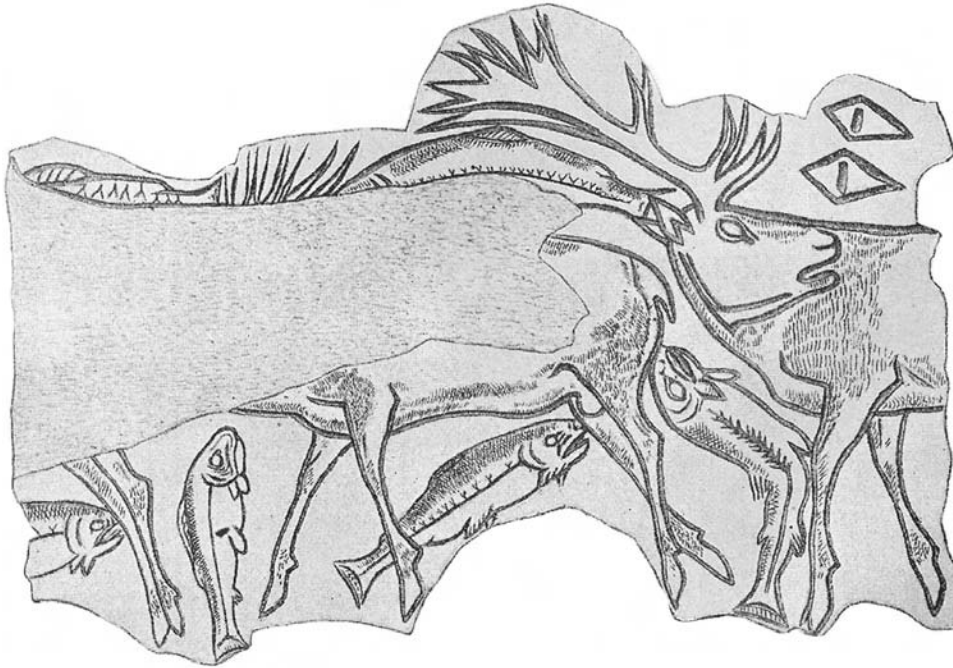
In addition, the meaning of this art varies in duration: some objects were created for immediate use and then destroyed (ceramic or siltstone figurines) or replaced by another image (overlapping engravings in stone), whereas others were in use for long intervals of time (personal adornments or amulets, decorated weapons and tools).

The Language of Forms

Items of material culture may be ordered into sequences, a “language of forms” in the sense articulated by Andre Leroi-Gourhan (1965). As posited by Ian Hodder (1993), this speech has a kind of rhetoric, filled with metaphor and synecdoche. Some of it is readable, such as the zoomorphs (animal forms) that either simplify the shape of a human figure, or replace the figure with a head or sexual organs. Some sequences are just labeled as repetitive geometric patterns. Decoding their meaning would require an understanding of the metaphors of the pattern, the function of the decorated objects, the action in which the object was used, and the status of its user.

Self-Awareness

Items of body decoration inform us about the function, status, and role of an individual and contribute to the concept of “self.” The earliest sound evidence for the existence of pendants in Europe occurs in the Chatelperronian and Aurignacian cultures, those of the former still produced by Neanderthals, and the latter by modern humans. By the Gravettian there is already a relatively



An incised drawing of salmon and stags on a deer antler. From southern France.

large variation in pendant shapes, but also standardization of some of them, starting with ivory rings with carved symbols, simple animal stylizations, and geometric forms, and ending with pierced natural objects such as carnivore teeth and mollusk shells. Certain patterns engraved on objects are culture dependent (e.g., the Gravettian is typified by short lines ordered in geometric patterns; the Magdalenian style is more dynamic, with longer, curved lines). As to the social significance of these objects, we may assume that a given decorative system provides information on social cohesion and awareness of communal identity (Wobst 1977).

Anthropomorphs: Vision of the Self

The definition of “self” is contradicted by the anonymity of most of the anthropomorphs encountered in Paleolithic art. The head and face, instead of expressing individuality, are usually reduced to geometric forms, as in the Gravettian figurines, or deformed (“caricaturized”) as in the parietal cave art. The Gravettian female figurines have been interpreted as depictions of living females, long-dead ancestors, mythical goddesses, or as symbols of fertility, life, home, and beauty. Comparisons across Europe have led to statements about similarity of design, which may reflect long-distance interaction, whereas an individual focus on sites where female figurines are found in series (Brassemouy, Grimaldi, Dolni Vestonice, Pavlov

and some eastern European sites) reveals patterns of local variability. During the Magdalenian, the perspective of the female figure changed from a frontal to a side view, and the profile with exaggerated buttocks was even more simplified.

As a paradox in this context, the relatively realistic female faces from Dolni Vestonice and Brassemouy suggest that here we are confronted with concrete individuals. Even if unusual as a practice, these earliest “portraits” accord with the concept of the self that is thought to have existed during the Paleolithic era.

Zoomorphs: Vision of the External World

Animals represent the most important subjects imprinted on humans by the external world. The selection of the species, however, is influenced not only by their existence in the surrounding landscape and on the hunter’s menu, but also by their importance in the hunter’s mental world, and, possibly, in mythology. Just as the anthropomorphs are not expected to represent a particular person, a zoomorph is understood as a symbol of the species and its properties. Therefore, large, imposing, dangerous animals (mammoth, lion, bison, horse) dominate in art, even if smaller animals (hares, foxes) were sometimes more numerous in the faunal record. This also explains the long-lasting tradition of mammoth representations in the later Paleolithic periods, when these large animals were

already rare in nature (Gonnarsdorf in Germany, Rouffignac in France).

Double Readings

In some of the French cave art sites there is no clear division between anthropomorph and zoomorph subjects (for example, human faces associated with animal bodies). Similarly, the bipolar division of anthropomorphs into male and female groups on the basis of their physical form (as in the Western structuralist approach) may be replaced by dual or multiple meanings, such as the “transitional” bird-female or phallic-female carvings from Mezin, Ukraine. Some female figurines encourage a double reading, where the breasts may change to testicles and the stylized body to a penis. So the Black Venus of Vestonice, for example, becomes a synthesis of the female organ below (triangular legs) with a male organ above (breasts and head). It may symbolize cosmic unity of the opposed symbols, and be a joke as well.

Symbols in Action: Stories and Rituals

The individual symbols are ordered in systems and sequences. Examples are the images ordered inside the caves of western Europe, or figurines from the open-air sanctuaries of central and eastern Europe. Among the ceramic or siltstone fragments, there are fragmented heads, extremities, or bodies of mammoths, other larger herbivores, carnivores (mainly felines), and humans (mainly females). Some of them display intentional incisions, done while wet, or deformations caused by thermal shock during and after heating. This may be interpreted as a deliberate process of formation and destruction, a process that evidently had a ritual character and a symbolic meaning. Interestingly, recent studies of hand and finger imprints in the caves (Gargas, Rouffignac, both in France) as well as in the ceramic pieces from open-air sites (Pavlov, Dolni Vestonice, both in the Czech Republic) document the presence of children at the site during creation of the art. Both in the caves and in the open air, there is some sort of story behind these actions, a more complex one than was supposed in the earlier literature.

Modern explanations need to be more complex, and to take into account broader social backgrounds.

Jiri A. Svoboda

See also Foraging (Paleolithic) Era

Further Reading

- Breuil, H. (1952). *Quatre cent siècles de l'art pariétal* [Four hundred centuries of parietal art]. Montignac: Centre d'Études et de Documentation Préhistorique.
- Clottes, J., et al. (2001). *La grotte Chauvet: L'art des origines* [The Chauvet Cave: The art of origins]. Paris: Seuil.
- Conkey, M. W., Soffer, O., Stratmann, D., & Jablonski, N. G. (Eds.). (1997). *Beyond art: Pleistocene image and symbol*. San Francisco: California Academy of Sciences.
- Hodder, I. (1993). The narrative and rhetoric of material culture sequences. *World Archaeology*, 25, 268–282.
- Leroi-Gourhan, A. (1965). *Préhistoire de l'art occidental* [Prehistory of Western art]. Paris: Mazenod.
- Lewis-Williams, D. (2002). *The mind in the cave: Consciousness and the origin of art*. London: Thames and Hudson.
- Marshack, A. (1972). *The roots of civilization*. New York: McGraw Hill.
- Svoboda, J. (1997). Symbolisme gravettien en Moravie: Espace, temps et formes [Gravettian symbolism in Moravia: Space, time, and forms]. *Bulletin de la Société Préhistorique Ariège-Pyrénées* 52, 87–104.
- Wobst, H. M. (1977). Stylistic behavior and information exchange. In C.E. Cleland (Ed.), *For the director: Research essays in honor of James B. Griffin* (pp. 317–342). Ann Arbor, MI: Museum of Anthropology.

Asia

Asia is the world's largest, most populous, and most culturally diverse continent. It combines extremes of height, depth, temperature, rainfall, humidity, aridity, and population density. People speak hundreds of languages from one end of Asia to the other. It contains different forms of human relationships to the land, including sparse but mobile pastoral groups, desert and jungle dwellers, large agrarian economies, powerful systems of interregional trade, and lately huge industrialized regions. It includes some of the world's fastest-growing nations as well as some of its poorest and most backward.

We can divide Asia into six basic cultural regions: (1) East Asia is dominated by China and Japan. (2) Southeast Asia is a region of island and peninsular countries and

When distant and unfamiliar and complex things are communicated to great masses of people, the truth suffers a considerable and often a radical distortion. The complex is made over into the simple, the hypothetical into the dogmatic, and the relative into an absolute. • WALTER LIPPMAN (1889–1974)

has no one dominant country or culture. (3) South Asia is dominated by India but houses Islamic and Hindu cultures. (4) Central Asia includes Iran and several countries formerly belonging to the Soviet Union. Persian (Iranian) culture has significantly influenced this region, as has the interaction between Sunni Islam and Shia Islam. (5) West Asia (excluding the Arabian Peninsula) is mostly successor states of the Ottoman empire and post-World War I British and French protectorates. Turkey, Iraq, Israel, and Saudi Arabia are key countries in this oil-rich but politically troubled region. (6) North Asia is Russia. A question here is whether the curve formed by the Ural Mountains, the Ural River, the Caspian Sea, and the northern slopes of the Caucasus Mountains separates “European” Russia from the much larger Russian domain east of this line. In his study of Asia’s lands and peoples George Cressey argued that this demarcation made little sense agriculturally or economically. However, geographers recognize it because of the West-East political and cultural stance adopted by Russian elites since the time of Czar Peter the Great.

From the perspective of world history the critical areas to look at first are those of West Asia, South Asia, and East Asia. Apart from Egypt and Nubia, these are the areas that gave birth to the earliest major civilizations. The civilization of Mesopotamia, developing around the valleys of the Tigris and Euphrates Rivers, formed the matrix from which arose the Abrahamic religions of Judaism, Christianity, and Islam. These Asian religions and their peoples have exerted a huge impact on world history as both actors and victims.

Because of the antagonisms that developed among followers of these religions, many people see them as irreconcilable forces accounting for the clash of empires and nations and the rise and decline of civilizations. Certainly the divisions run deep and continue to influence the history of our times. Christianity and Judaism turned against each other during the later first century CE, beginning a long trail of suspicion and hatred that led up to the Holocaust of World War II. For eight centuries Christian and Islamic forces fought over control of Andalusia in Spain. Crusaders stormed Antioch and Jerusalem in 1098–

1099, indiscriminately killing Muslims and Jews as infidels. Turkish Ottoman rulers conquered Constantinople (Istanbul in modern Turkey) in 1453, terminating the Byzantine empire and converting the Hagia Sophia (holy wisdom) church into a mosque. They sent armies into battle in eastern Europe, seeding Islam in the Balkans and laying the groundwork for Serbian resentment and slaughter of Muslims in Bosnia and Kosovo during the 1990s. Between 1894 and 1915 Ottoman forces persecuted Christian Armenians, culminating in the massacres of Armenian refugees in 1915. Reverberations of Christian-Islamic antagonism can be seen in the Soviet occupation of Afghanistan during the 1980s and the war in Chechnya today. Today seemingly intractable conflicts involving Christian, Jewish, and Islamic armed forces are continuing in Israel, Palestine, and Iraq.

The task of history, however, is not just to account for differences but to examine broader themes represented by these profoundly influential religions and the cultures and people who subscribe to them. These religions all adopted an approach to monotheism of which Abraham is widely regarded as the first exponent. They are advocates for certain values that include adherence to a divine creator, adoption of various sacred texts embodying the norms of Abrahamic monotheism, commitment to justice and mercy in human relations, and almsgiving to the poor. They have given rise to some of the world’s most magnificent art, architecture, gardens, poetry, romances, philosophic reflection, and historical inquiry. Despite all the mutual destruction, they have engaged in trade, intermarriage, and cultural exchange and in various ways preserved each other’s cultural traditions.

During recent years historians have begun to reexamine such common themes and to recognize their benefits to people living all over the world. Most practitioners of the Abrahamic religions are still far from embracing these commonalities. In this respect the global history of the last two hundred years, with its rising theme of Western disdain for, and exploitation of, a supposedly stagnant Asia, has not been conducive to better mutual understanding. Thus, an urgent task for contemporary world historians is to identify texts, historical eras, and



A sixteenth century Chinese painting showing inspiration from Daoism and Buddhism, two major religions of Asia.

personalities that facilitated the practice of positive values and exchanges between Islam, Judaism, and the Christian West, as well as to clarify when and why such exchanges were abandoned and at what cost.

Earliest Civilization

The early history of south Asia presents another matrix for viewing the course of world history. The earliest civilization emerged along the Indus River, where researchers have uncovered the remains of splendid cities rich with artifacts. Unfortunately the written materials unearthed do not include substantial texts and have not yet been deciphered. Until fairly recently experts assumed that this culture was overrun during the middle of the second millennium BCE by Aryan peoples migrating from central Asia. However, now more experts argue that natural calamities are more likely to have been the main cause for the abandonment of the Indus communities and that a cultural break did not necessarily occur between the people of that culture and the people who created the Vedic (relating to the Hindu sacred writings) literature and traditions identified with the Ganges River valley. If this argument holds, it will confirm a continuity of civilization in the Indian subcontinent going back five or six thousand years, which would in turn help to explain the reverence and tenacity with which so many Indian people subscribe to the texts and traditions of Hinduism.

In viewing world history from this region, one noteworthy theme is the rise and diffusion of Buddhism. Inspired by the life and teachings of the Indian philosopher Siddhartha Gautama (c. 560–480 BCE), Buddhism took root in northern India and developed rapidly under

the reign of the Mauryan king and Buddhist convert Asoka (reigned 273–232 BCE). Gautama taught a spiritual practice for gaining liberation from suffering that addressed universal human conditions and thus could be applicable in other cultural settings. As a religious convert, Asoka put the teachings of Gautama into action and sent missionaries to Kashmir, south India, Ceylon (Sri Lanka) and Burma (Myanmar). The historian H. G. Rawlinson described these missions as

“amongst the greatest civilizing influences in the world’s history.” Theravada Buddhism, the earliest form of this religion, gradually extended farther into central Asia and peninsular Southeast Asia.

During the reign of the great central Asian Kushan king Kanishka (reigned c. 120–162) a new and extended form of Buddhism (Mahayana) came into being. Empowered by doctrines of redemption and rebirth it spread into central Asia and thence to China, Korea, and Japan, carried partially by central Asian missionaries but also by traders. The famous grottoes in Dunhuang in northwest China (Gansu Province) attest to the extraordinary faithfulness of these practitioners, their ability to transcend unbelievable hardships en route, and the sophistication of their visions of human potential. This vision and energy can still be encountered among Buddhist practitioners throughout East Asia. Thus, they invite historians to understand how religious transmission can overcome cultural barriers, survive hostility and opposition, and integrate into cultures with different historical traditions.

A third form of Buddhism (Tantric) made its way across the Himalayas to Tibet, Mongolia, and parts of eastern Russia, where it continues to flourish. The dispersal of Tibetan people throughout the world since 1959 has attracted considerable attention to Tantric Buddhism, not least because of the leadership of the fourteenth Dalai Lama. The provocative visual symbology of Tantrism, its intense rituals and extremities of devotion (exhibited in the grueling kneeling and prostrating pilgrimages to Lhasa and Mount Kailas in Tibet), and its adherence to doctrines of karma and rebirth represent a challenge to

the materialism pursued in both East and West. This challenge is still in its early days, and its impact remains to be determined.

Ironically Buddhism lost ground in India to a reviving Hinduism and to invasions by Islamic armies who laid waste to Hindu and Buddhist communities during the eleventh and twelfth centuries. More than 400 million Muslims now live in the Indian subcontinent, alongside 700 million or more followers of Hinduism. This has been an uneasy cohabitation. At its height the Islamic Mughal dynasty under Akbar (reigned 1556–1605) and Shah Jehan (reigned 1628–1657) provided a civilized and in many ways enlightened regime, of which the most famous legacy is the sublime Taj Mahal in Agra, India. Unfortunately, times have changed. Since the end of the British Raj (rule) and the partition of India in 1946, millions have died in civil war, in religious confrontations, and in the ongoing war in Kashmir. The conflict between India and Pakistan—now both nuclear powers—continues to threaten world stability. Lack of understanding about India in the United States and unwillingness to admit the extent to which religion can drive political agendas are problems that need attention if this threat is to be diminished.

Chinese Civilization

China also enjoys five thousand or more years of civilization. Its unique writing system emerged during the early to middle years of the second millennium BCE. The doctrine of the Mandate of Heaven began to take shape at the beginning of the Zhou dynasty (1045–256 BCE) during the eleventh century BCE, and the earliest poetic and historical documents followed not long after. From these early traditions emerged the philosophies of Confucianism and Daoism, which have done so much to shape political and cultural thinking in China and also in Korea, Japan, and Vietnam. From Confucianism emerged the systems of education and bureaucratic management through which China's agrarian empires were managed and its histories produced, and from Daoism came the investigation of being and nonbeing through which Chinese were able to practice ways of living that were an alternative to those

required in the public arena. These alternative images of existence, onto which Mahayana Buddhism was superimposed, enabled Chinese culture to survive repeated fluctuations of expansion and contraction, including subjugation by foreign peoples, and to maintain a distinctive world perspective to the present day.

From the viewpoint of world history one can explore various themes in the Chinese context. One theme is the interaction between nomadic pastoral cultures and the powerful agrarian state that grew up around the Huang (Yellow) and Chang (Yangzi) Rivers. This interaction goes back to prehistoric eras; it enters the historical record during the Zhou dynasty and becomes a dominant theme during the four hundred years of the Han dynasty (206 BCE–220 CE). At that time the Xiongnu were the dominant nomadic contenders, and much of Han statecraft was taken up in efforts to bring these aggressive raiders under control. During the fourth and fifth centuries Turkic peoples ruled much of north China. During the Song dynasty (960–1279) their role was taken mainly by Khitans and Jurchen people from northeast Asia. Then the Mongol regime, which had taken over north China under the rule of Genghis Khan (c. 1162–1227) and his immediate successors, seized control of the rest and installed its own Yuan dynasty (1279–1368) over all China. The Ming dynasty (1368–1644) was able to push the Mongols back into Inner Asia but not to subdue them. In 1644 another northeast Asian regime, led by Manchus, seized control of north China, setting up the Qing dynasty (1644–1912). During the next forty years it suppressed all opposition, and in the mid-eighteenth century it brought the remaining Mongol regimes to heel.

Thus, for long periods foreigners have ruled China. Mongols also imposed regimes with much bloodshed in Central and West Asia and for a brief period appeared poised to overrun eastern Europe. Later central Asian empires, such as those created by Timur (reigned 1370–1405) and the Mughal dynasty founded by Babur (1483–1530), were offspring of the original Mongol regimes, testifying to the remarkable and sustained military and political power consolidated by Genghis Khan and his successors. That is why the history of these

regimes demands the attention of world historians. Although these regimes arose from a marginal, steppe-bound cultural base, within a generation or two they were able to produce sophisticated rulers, such as Khubilai Khan (1215–1294) and Akbar, who were open to new ideas and personalities. Thus, the Polo family members of Italy were able to travel between Venice and East Asia, Roman Catholics to set up churches in the Yuan capital of Beijing, and Chinese Nestorian Christians to travel to western Asia and as far as France.

During the Mongol era Islam began to take root in China. Islam had been moving into central Asia from the eighth century CE on, replacing Buddhism and other religions. However, compared with Buddhism, its access into China and East Asia has been limited. The Hui segment of Chinese practitioners of Islam live in northwest and southwest China and in small numbers elsewhere, and Turkic Muslims live in larger numbers in China's most westerly province of Xinjiang. However, in China Muslims have run up against resistance and conflict from the dominant Confucian Han people. During the mid-nineteenth century this resistance and conflict resulted in two huge Muslim rebellions in southwest and northwest China, both of which were brutally suppressed. Thus, Islam remains strongest on the margins of Chinese civilization. It has had much greater success penetrating Southeast Asia and has become the dominant religious and cultural presence in Malaysia and Indonesia.

Although the rise of the West is generally traced (in the West) to the explorations of the Portuguese prince Henry the Navigator, the Italian explorer Christopher Columbus, and the Portuguese navigator Vasco da Gama, the activities of these men were of no concern in the Asian world, where much vaster political and military forces were deployed. From an Asian perspective one cannot speak seriously of the rise of the West until the later eighteenth century, when the British East India Company made inroads into the political and economic control of Bengal in India. Not until the mid-nineteenth century did British and U.S. forces successfully challenge the governments in Beijing and Tokyo.

However, from the mid-nineteenth century on all areas

of Asia came under increasing pressure from Western countries. Britain established hegemony (influence) over India and to a certain extent over Iran. France took control in Southeast Asia and Holland in Indonesia. British power overflowed into Burma and the Straits Settlements (now Malaysia and Singapore). Britain, France, the United States, and later Germany all competed for power in China and were able through diplomacy and coercion to force the Chinese government to yield treaty ports, concessions, extraterritorial legal privileges, and spheres of influence. Meanwhile, during the late seventeenth century czarist Russia began its long drive into eastern and central Asia. To the east it encroached on the hinterlands of the Manchu regime and managed through adroit diplomacy to carve off huge territories that are now part of Russia, including the vital seaport of Vladivostok. By the mid-nineteenth century Russia's encroachment into central Asia began to rub up against the hinterlands of the British Raj in Tibet, Afghanistan, and Iran, precipitating what became known as the "Great Game" for control of the petty kingdoms and principalities throughout central Asia. Because of czarist Russia's ability to deploy superior military forces this was a game that czarist Russia and its successor, the Soviet Union, were destined to win. Indeed, not until the Soviet debacle in Afghanistan during the 1980s and the collapse of the Soviet Union shortly thereafter was Russian power in central Asia significantly set back.

Rise and Fall

An understanding of the forces underlying the rise of Western imperialism and the decline of Asian sovereignty has long relied on two basic arguments. The first is the inherent superiority of Western values as expressed in democracy and market capitalism, a line of thinking originating with the Scottish economist Adam Smith and the French philosophes (deistic or materialistic writers and thinkers of the eighteenth-century French Enlightenment) and developed by the German sociologist Max Weber and others. The second is the Leninist argument that Western imperialism is an exploitative extension of bourgeois capitalism (manifested, e.g., in the sale of opium) that

A temple in Japan shows the attention paid to design typical of East Asian art and architecture.

would collapse with the achievement of worldwide socialist revolution. During most of the twentieth century these arguments battled for mastery. The collapse of Western colonialism during and after World War II, the retreat of the British from India, and the crowning success of the Chinese Communist revolution appeared to validate the Leninist case and put the West on the defensive. The postwar revival of the Western and Japanese economies, followed in due course by the collapse of the Soviet Union, China's near abandonment of its socialist economy during the 1980s and 1990s, and continuing political travails in Islamic countries appeared to do the reverse. Leninist arguments now carry little weight, and Western market capitalism and democracy seem to be in the ascendant.

However, before Western pride goes too far, we should recall the deep roots of non-Western civilizations and consider how their values could influence global history in the future. Eastern civilizations are not inevitably at a disadvantage against the West, as the rapid rise of Japan during the late nineteenth and early twentieth centuries testifies. Today China is on the march. During the last twenty-five years China's economy has been growing at an average annual rate of at least 7 percent. Large areas of urban China (a region of 400–500 million people and growing rapidly) have converted themselves into modern cities with new transportation and telecommunication infrastructures and massive new developments in industrial plants, office buildings, and high-rise housing. The Pearl River delta region is becoming the workshop of the world, just as Britain was during the later nineteenth century, and Wal-Mart is one of its leading customers. India is about twenty years behind China, but developments in Bangalore indicate what could be achieved elsewhere during the next few decades. No one can hold down such deep-



rooted cultures indefinitely. One hundred and fifty years of subordination to the West is a long time, but that time is now abating, at least for China and India, as it already has for South Korea, Taiwan, Hong Kong, and Singapore and as it did so forty years ago for Japan.

For other areas of Asia the future is less rosy. In Laos, Cambodia, Myanmar, Afghanistan, Tajikistan, Turkmenistan, Bangladesh, and Pakistan or in communities in Iraq, Palestine, and North Korea and in some rural areas of China, India, and Siberia, life is hard, and governments are too often corrupt and oppressive. Consider these data: The infant mortality rate in Afghanistan in 2000



was 144.76 deaths per 1,000 live births. In Laos it was 90.98 per 1,000, in Myanmar 72.11 per 1,000. However, in Japan it was 3.84 per 1,000. Literacy in Afghanistan was 39 percent, in Laos 57 percent, in Myanmar 81 percent, and in Japan 99 percent. In every case except the last, literacy of women is much lower. For Afghanistan the gross domestic product per person is calculated at \$800 per year; in Myanmar it is \$1,500. In Japan it is \$28,000. Figures such as these help to explain why Afghanistan and Myanmar are now the world's leading producers of opium and why their governments are controlled by warlords.

Does it have to be that way? Two thousand years ago Afghanistan flourished under great empires enriched by the Ghandaran culture that grew out of the invasions of Alexander of Macedon. Afghanistan was the site of one of the world's greatest Buddhist monuments at Bamiyan until the Taliban destroyed it in 2001. Silk Road commerce at its height brought wealth and opportunity into central Asia. Under Abbasid and Seljuk rule Samarkand in Uzbekistan became one of the world's richest and most cultured cities, the home of the brilliant eleventh-century poet and mathematician Omar Khayyam. Although devastated by Mongol invasion, the city rose to new heights as the capital of the Timurid empire and became one of the architectural wonders of the world. Balkh in Afghanistan was the birthplace in 1207 of Jalal ud-Din Rumi, a Sufi (Muslim mystic) and one of the world's most inspired poets. No region is without its glories or follies, and Asia is a rich source for the study of civilization and its problems.

John Watt and Shirley Moore

See also Afro-Eurasia; Akbar; Art—East Asia; Art—South Asia; Art—Southeast Asia; Art—West Asia; Asian Migrations; Asoka; Association of Southeast Asian Nations; Aurangzeb; Babi and Baha'i; British East India Company; Buddhism; China; Chinese Popular Religion; Confucianism; Confucius; Cyrus the Great; Daoism; Delhi Sultanate; Dutch East India Company; Genghis Khan; Han Wudi; Harappan State and Indus Civilization; Hinduism; Ho Chi Minh; Hong Merchants; Inner Eurasia; Islam;

Islamic World; Jainism; Japanese Empire; Khmer Kingdom; Kushan Empire; Lao Tzu; Mahavira; Mao Zedong; Mencius; Mesopotamia; Mongol Empire; Mughal Empire; Orientalism; Pastoral Nomadic Societies; Persian Empire; Polo, Marco; Porcelain; Qin Shi Huangdi; Revolution—China; Revolution—Iran; Revolutions, Communist; Ricci, Matteo; Rumi; Sasanian Empire; Shinto; Siddhartha Gautama; Sikhism; Silk Roads; Sima Qian; Spice Trade; Srivijaya; Steppe Confederations; Sui Wendi; Sui Yangdi; Süleyman; Sun Yat-sen; Tang Taizong; Tea; Timur; Trading Patterns, China Seas; Trading Patterns, Indian Ocean; Turkic Empire; Umar ibn al-Khattab; Warfare—China; Warfare—Islamic World; Warfare—South Asia; Warfare—Southeast Asia; Warfare—Steppe Nomads; World Maps, Chinese; Yijing; Yongle Emperor; Zheng He; Zhu Yuanzhang; Zoroastrianism

Further Reading

- Armstrong, K. (1993). *A history of God: The 4000-year quest of Judaism, Christianity and Islam*. New York: Knopf.
- Barks, C. (1997). *The essential Rumi* (J. Moyne, Trans.). Edison, NJ: Castle Books.
- Cohen, W. I. (2000). *East Asia at the center*. New York: Columbia University Press.
- Cressey, G. B. (1963). *Asia's lands and peoples* (3rd ed.). New York: McGraw-Hill.
- Feiler, B. (2002). *Abraham: A journey to the heart of three faiths*. New York: HarperCollins Perennial.
- Feuerstein, G., Kak, S., & Frawley, D. (2001). *In search of the cradle of civilization: New light on ancient India*. Wheaton, IL: Quest Books.
- Esposito, J. L. (1999). *The Oxford history of Islam*. New York: Oxford University Press.
- Hopkirk, P. (1991). *The great game: On secret service in high Asia*. New York: Oxford University Press.
- Jagannathan, S. (1984). *Hinduism: An introduction*. Bombay, India: Vakils, Feffer and Simons.
- Komaroff, L., & Carboni, S. (Eds.). (2002). *The legacy of Genghis Khan*. New York: Metropolitan Museum of Art.
- Landes, D. S. (1998). *The wealth and poverty of nations: Why some are so rich and some are so poor*. New York: Norton.
- Marks, R. B. (2002). *The origins of the modern world: A global and ecological narrative*. New York: Rowman and Littlefield.
- Rawlinson, H. G. (1952). *India: A short cultural history*. New York: Praeger.
- Smith, J. (Ed.). (1999). *Radiant mind: Essential Buddhist teachings and texts*. New York: Riverhead Books.
- Snellgrove, D., & Richardson, H. (1995). *A cultural history of Tibet*. Boston: Shambala.
- Thubron, C. (2000). *In Siberia*. New York: Penguin Books.
- Weatherford, J. (2004). *Genghis Khan and the making of the modern world*. New York: Crown Publishers.

Asian Migrations

Human migration is a central theme in world history and can be traced back to prehistory. Some of the movements after 1500 CE are well known, such as the migration of millions of Europeans to the Americas, Oceania, and southern Africa and the transport of many enslaved Africans across the Atlantic. The less well-known migrations of Asian peoples also began early and continued down to modern times. During the past several centuries millions of eastern and southern Asians relocated temporarily or permanently, some to nearby countries, others to faraway lands, making these migrants and their descendants a visible and vital presence in the world economy and in the population of many nations.

The Long History of Asian Migration

Large-scale migration, often over long distances, has been a pronounced pattern for thousands of years. Various Asian peoples were among those on the move between 4000 BCE and 1000 CE. Chinese spread from northern into southern China. Mobile Central Asian pastoralists migrated frequently. Some of them moved into China, western Asia, or Europe. Various peoples from West and Central Asia crossed the high mountains into northwestern India, where they mixed with the existing populations. Many Japanese descend from Koreans who crossed to the archipelago several millennia ago. Austronesians spread from Taiwan into the Philippines, Indonesia, and Malaysia. From there, some Austronesians, using advanced maritime technology and navigational skills, sailed east into the vast Pacific, settling remote islands and forming the societies of Oceania. The descendants of these Asians include the Hawaiian, Maori, Samoan, and Tahitian people. Other Austronesians sailed the other way, sojourning in East Africa and occupying the island of Madagascar. Thanks to migration, Austronesian languages are spoken today from the western Indian Ocean to the eastern Pacific. The ancestors of the closely related Thai and Lao peoples moved from south-

western China into Southeast Asia a millennium ago, eventually forming their own states.

In the eighteenth century, another large-scale migration of peoples from eastern and southern Asia began, mostly by sea to distant shores. The emergence of capitalism in Europe and the emergence of a truly world economy played a role. In a quest for resources and markets to be exploited, Western nations colonized most Asian, African, and American societies. The development of modern transportation networks, aided by the introduction of larger and faster ships and later by air travel, facilitated this movement. Some colonial powers looked to the densely populated Asian societies to provide a labor force for their plantations and mines. In more recent decades many Asians, some middle class, some refugees, and others impoverished workers seeking low-wage jobs, have migrated to Western nations legally or illegally.

Today perhaps 40–45 million Asians live outside, and often thousands of miles away from, their ancestral homelands. Chinese and Indians account for the great majority of Asian migrants. Many settled in Southeast Asia, but the two groups also established large communities in the Americas, Pacific islands, Europe, and parts of Africa. Japanese, Koreans, Filipinos, and Indonesians moved to Pacific islands and the Americas. In last thirty years of the twentieth century, several million Vietnamese, Laotians, and Cambodians fled war and repression for new homes elsewhere, particularly in North America. These varied diasporas of Asian peoples constitute one of the more important social and economic developments in modern world history.

Chinese Emigration

The Chinese accounted for some two-thirds of the long-distance Asian migration between 1750 and 1940. More than 30 million people of Chinese ancestry or ethnicity, often known as overseas Chinese, live outside of China, Taiwan, and Hong Kong today. Over 20 million of them reside in Southeast Asia. As a result, some 7 or 8 percent of all Southeast Asians have some Chinese ancestry. Three-quarters of Singapore's population is ethnically Chinese, as is a quarter of the population of Brunei, a



This sign on a library in London, England, in 2003 is in both English and Chinese, reflecting the ethnic makeup of the neighborhood.

have sailed to Southeast Asia to trade for several thousand years. By the fifteenth century Chinese trade networks linked Southeast Asian trading ports to the southeastern Chinese coast. Beginning in the later 1500s Chinese settlers became dominant in the commercial sector in several Western colonies in Southeast Asia, including the Spanish-ruled Philippines and Dutch-ruled Java. Between 1750 and 1850 many Chinese settled in Thailand, Malaya, and Indonesian islands such as Borneo to trade or mine for tin and gold, sometimes establishing their own self-governing communities. The present royal family of Thailand descends from an eighteenth-century Chinese immigrant.

During the later nineteenth and early twentieth centuries, wars with the Western nations and Japan, rebellions, corruption, population explosion, growing landlessness, and natural disasters in China prompted millions to emigrate, mostly to places where Western colonialism and capitalism were creating new economic opportunities. Some

third of Malaysia's population, and thirteen percent of Thailand's. Three countries—Indonesia, Malaysia, and Thailand—each contain at least 4 million people of Chinese descent. More than a million ethnically Chinese people live in the United States. Several dozen nations or territories outside Southeast Asia also have sizeable Chinese communities. These include Japan, Canada, Mexico, Cuba, Jamaica, Trinidad and Tobago, Guyana, Surinam, Panama, Costa Rica, Peru, Brazil, the Society islands (including Tahiti), Fiji, Papua New Guinea, Australia, New Zealand, India, South Africa, Malagasy, Mauritius, Great Britain, the Netherlands, Germany, Portugal, France, and Russia. But most nations in the world have at least a few Chinese-run restaurants or other businesses, making the Chinese diaspora perhaps the world's most widespread.

This emigration has a long history. Chinese merchants

90 percent of the emigrants came from two impoverished and overcrowded coastal provinces, Fujian and Guangdong, which were particularly hard-hit by Western military and economic intrusion. Between 1880 and 1920 several hundred thousand people a year left from the ports of Hong Kong, Guangzhou (Canton), Xiamen (Amoy), and Shantou (Swatow) for foreign destinations.

Many were recruited into the notorious "coolie trade," which operated from the 1820s into the 1920s. Under this system, desperate peasants become workers (known pejoratively as coolies) in far away places, especially Southeast Asia, various South Pacific and Indian Ocean islands, Hawaii, Australia, Peru, Cuba, California, and South Africa. In order to repay their passage, the Chinese signed contracts to work as plantation laborers, miners, or railroad builders for a fixed period of time, often five or ten years. The system invited exploitation in an alien

environment, where the laborers who survived the difficult voyages in crowded ships faced discrimination and harsh working conditions.

Not all Chinese emigrated as part of this trade. Some paid their own fares, usually to join relatives in business enterprises. Most immigrants dreamed of returning to their native village wealthy, and some did. But many stayed overseas permanently, some because they had failed to achieve their dreams, others because they had established small businesses with their savings, marrying local women or bringing families from China. But even those who settled abroad often sent money back to their home villages or invested in China. Today the overseas Chinese are an important source of capital for China.

The Overseas Chinese Communities

Over time, the overseas Chinese were transformed from sojourners into settlers. Through enterprise, organization, and cooperation many Chinese in Southeast Asia became part of a prosperous, urban middle class that controlled retail trade. A few became fabulously wealthy businessmen or industrialists. Chinese commercial networks extended into the smallest towns. For example, many Chinese shops in small towns in Malaya and Borneo were linked through firms in larger towns to big companies in Singapore. Singapore, with a mostly Chinese population, became the major hub of Chinese economic and social networks in Southeast Asia, although Bangkok (Thailand), Jakarta (Indonesia), and Saigon (Cambodia) also played important roles. But some Chinese remained poor, eking out a living as commercial fishermen, small-holding rubber growers, or day laborers. For example, the men who pulled the rickshaws in the steamy tropical heat of Singapore and Malaya faced a difficult life and often died young, sometimes from suicide.

Today the majority of Chinese in Southeast Asia, as well as in the South Pacific and Indian Ocean islands, the Caribbean, and Latin America, are engaged in commerce. The ethnic Chinese have constituted the most dynamic economic sector in Southeast Asia, with their money and initiative the basis for recent dynamic economic growth

in Singapore, Malaysia, Thailand, Indonesia, and the Philippines. In North America and Europe many also opened businesses, often family-run restaurants, but many of their children gravitated to the professions or the high-technology industries. In the second half of the twentieth century many new emigrants fled Communism in China or lack of opportunity in Taiwan and Hong Kong for new lives in North America, Australia, Canada, or Europe. Most, especially the well educated, found success in their new homes, transforming the Chinese into one of the most affluent ethnic groups in these countries. But pockets of grinding poverty also remained, for example among the badly exploited immigrant workers in the small textile factories of crowded urban Chinatowns.

Many non-Chinese in Southeast Asia and the South Pacific resented the Chinese because of their enterprise, economic power, desire to preserve their language and culture, and their continuing ties to families or hometowns in China. Before the 1930s most Chinese in colonies such as Malaya and Cambodia were administered through their own leaders, usually powerful merchants, planters, or mine owners, perpetuating their separateness from local society. Conflict between descendants of Chinese emigrants and local people has been common in Indonesia, Malaysia, and the Philippines for several centuries, occasionally leading to anti-Chinese violence. Some governments have restricted Chinese political rights or curtailed economic activity. In the late 1970s many Chinese left or were expelled from Vietnam. Some of them joined a steady stream of Southeast Asian Chinese moving to North America or Oceania. But Chinese leaders run Singapore and have also played an active role in Malaysian politics. Politicians of Chinese ancestry have led Thailand and the Philippines at various times, as well as Papua New Guinea, Guyana, and Surinam.

The Chinese have adapted to local environments in varied ways. Many assimilated over several generations. Some mixed local and Chinese customs, beliefs, and languages. These people formed distinct sub-groups such as the Peranakans of Java, the Straits Chinese of Malaya, and the Sino-Thai of Bangkok, who linked the Chinese and local peoples and moved between both worlds. But the

majority of Chinese maintained their language, customs, religion, and separate identity. Many such people live in or near the large Chinatowns of cities such as Kuala Lumpur (Malaysia), Manila (Philippines), Sydney (Australia), Vancouver (Canada), San Francisco and New York (United States), Lima (Peru), and Liverpool (United Kingdom). Most Chinese emigrants spoke one of a half dozen quite different dialects. Wherever they have settled, the Chinese have organized their own schools, temples, business associations, and social organizations, fostering considerable cooperation and solidarity, which has helped sustain the Chinese communities in so many diverse environments.

Indian Emigration

Conditions in India also stimulated emigration during the nineteenth and early twentieth centuries, producing an overseas diaspora of 7 or 8 million today, around a quarter of the emigrant Asian population. British colonization spurred population growth but also increasing poverty for many peasants, with no industrial revolution to absorb the excess people. As a result of these mounting problems, many millions of desperately poor, often landless, Indians, mostly Hindus but also some Muslims and Sikhs, were recruited to move to other lands. Many originated from South India; the Tamils of the southeastern coast became the largest Indian group in Southeast Asia and Sri Lanka. Others originated in North India.

The abolition of slavery in the Americas and the needs of sugar or rubber plantations in tropical colonies created a market for indentured Indian labor. Governments in Sri Lanka, Malaya, Fiji, Mauritius, South Africa, and the Caribbean societies of Trinidad, Guyana, and Surinam recruited Indians in a system similar to the Chinese coolie trade. Other Indians built the railroads of British East Africa. Indian merchants, moneylenders, and laborers also flocked to British Burma (present-day Myanmar), Singapore, and East Africa. Some Indians settled on the Pacific coast of Canada and the United States. Between 1880 and 1930 around a quarter million people a year, both men and women, left India. The mortality rates were so high and the indenture terms so oppressive that crit-

ics considered the system another form of slavery. Later in the twentieth century several million South Asians moved to Britain, establishing growing communities in most industrial cities, emigrated to North America and Western Europe, or became merchants, service workers, and laborers in the Persian Gulf states.

Overseas Indian Communities

The resulting diaspora made Indians a recognizable group in countries around the world. Indian trade networks reach around the Indian Ocean and Pacific Rim, connecting the seaport of Aden in Yemen, Tanzania, Malagasy, and South Africa to Hong Kong, Japan, California, and British Columbia. The diaspora is reflected today in “little Indias” from Nairobi (Kenya) to Singapore to Trinidad. The great Indian nationalist leader Mohandas Gandhi (1869–1948) experimented with nonviolent resistance to oppressive power while working with the large Indian community around Durban, South Africa.

Today people of Indian ancestry account for a majority of the population in Mauritius, at least half the population of Trinidad, Guyana, Surinam, and Fiji, a fifth of the population of Sri Lanka, a tenth in Malaysia and Singapore, and 5 percent in Kenya and South Africa. They number some 1.5 million in Great Britain, around a million in the United States and Canada, and some 2 million in the Middle East. Sizeable South Asian populations, mostly involved in commerce, also exist in several dozen African nations, most of Southeast Asia and Western Europe, many Caribbean islands, Australia, and New Zealand.

Indian experiences in the diaspora have varied. Some in Southeast Asia, Fiji, and the Caribbean have done well in business or the professions, while large numbers still labor on plantations, although often in conditions somewhat better than during colonial times. The majority in North America have become prosperous businessmen and professionals. Indian entrepreneurs and scientists are leaders in the high-technology sector. Indians in the United States enjoy the highest educational levels of all ethnic groups. In Great Britain many have achieved

Restricting Chinese Immigration to the United States

Chinese laborers played a major role in opening the western United States to settlement. But, when their labor was no longer needed and they were thought to be too numerous, the United States enacted laws designed to restrict immigration. This Convention Regulating Chinese Immigration was enacted on 17 March 1894.

Article I. The High Contracting Parties agree that for a period of ten years, beginning with the date of the exchange of the ratifications of this Convention, the coming, except under the conditions hereinafter specified, of Chinese laborers to the United States shall be absolutely prohibited.

Article III. The provisions of this Convention shall not affect the right at present enjoyed of Chinese subjects, being officials, teachers, students, merchants or travellers for curiosity or pleasure, but not laborers, of coming to the United States and residing therein . . .

Article IV. In pursuance of Article III of the Immigration Treaty between the United States and China, signed at Peking on the 17th day of November, 1880, . . . it is hereby understood and agreed that Chinese laborers or Chinese of any other class, either permanently or temporarily residing in the United States, shall have for the protection of their persons and property all rights that are given by the laws of the United States to citizens of the most favored nation, excepting the right to become naturalized citizens. And the Government of the United States reaffirms its obligation, as stated in said Article III, to exert all its power to secure protection to the persons and property of all Chinese subjects in the United States.

Source: MacMurray, J. V. A. (Ed.). (1921). *Treaties and agreements with and concerning China* (pp. 1899–1919). New York: Oxford University Press.

wealth as entrepreneurs and professionals, and others prosper as small shopkeepers. But some South Asians encounter discrimination and hostility in Great Britain and other Western nations.

Like the Chinese, overseas Indians have faced many challenges that have shaped their adaptation. Indians have been involved in bitter struggles for political power with the descendants of Africans in Guyana, Surinam, and Trinidad, and with Melanesian Fijians in Fiji. In these nations, Indians formed their own political parties, which have sometimes won elections and installed their leaders as prime ministers. But the ethnic rivalries have sometimes led to conflict, especially in Fiji. In Sri Lanka, some of the large Tamil minority have sought autonomy and more rights through violence, fomenting a civil war that has kept the nation in turmoil for several decades. Hostility against the Indian trading community contributed to their expulsion from Uganda in the 1970s; many of those expelled moved to Britain or North America. Indians have faced economic restrictions in Kenya and Tanzania.

Most Indians have adapted to the political and economic realities of their new countries, taking local citizen-

ship and establishing permanent roots. Some have abandoned the traditions of their ancestors, but the majority remain conservative in culture. While caste identities and restrictions have often faded in the diaspora, most overseas Indians maintain their customs and religions, generally marrying within their own groups. Those who have emigrated more recently have forged a continuing connection to their families and ancestral villages in India, fostering the movement of peoples back and forth.

Japanese and Korean Emigration

Generally pushed by poverty, overpopulation, war, or repression, many people emigrated from Northeast Asia, forming cohesive communities in new lands. Many Japanese left their islands between 1850 and 1940. Some settled in Hawaii, many to work on plantations or in the canning industry. Today their descendants are the largest ethnic group in Hawaii. Other Japanese migrated to the Pacific Coast of the United States and Canada, some taking up farming in California. When the United States and Canada tightened their immigration restrictions on Japanese in 1907 and 1908, the emigrant flow turned to Latin

America, especially Peru, Brazil, Paraguay, and Argentina. Many Japanese joined agricultural colonies or mining operations. Later the cultural networks they forged allowed many Japanese to leave wage labor for the ownership of businesses and farms. Leaving instability, Koreans also joined the flow overseas, especially to Hawaii between 1903 and 1905. During World War II many Japanese in the United States and Canada were interned in concentration camps, often losing their property.

By the mid-twentieth century emigration from Northeast Asia flowed again to the Americas. Today some 1.5 million people of Japanese ancestry live in Latin America, and another million in the United States. Japanese-Americans have become one of the most affluent and well-educated ethnic groups. In a reverse migration, thousands of Brazilian-born Japanese have started moving back to the land of their ancestors. Korean migration to North America began in the 1960s on a large scale, many immigrant families opening grocery stores in large cities such as New York and Los Angeles. The new arrivals increased the total Korean-American population to some 300,000.

Southeast Asian Emigration

Emigration from Southeast Asia has also been significant in the past 150 years, spurred by colonization, war, and political turbulence. Between 1875 and 1940 Indonesians, mostly Javanese, were recruited to work on plantations in nearby Malaya and North Borneo but also in Surinam and, on a smaller scale, the Pacific island of New Caledonia. Some fifty thousand Javanese today live in Surinam. During the early 1900s the French shifted a few thousand Vietnamese to the South Pacific islands they controlled, mostly as plantation laborers. After the United States colonized the Philippines in 1902, Filipinos began migrating to Hawaii and the Pacific coast of the United States as laborers or farm workers. The migration has continued ever since. Today 1.5 million Filipinos live in the United States, many of them prosperous. Many Filipinos also work in the Persian Gulf, mostly in service industries.

The devastating wars in Vietnam, Laos, and Cambodia in the 1960s and 1970s generated another major migration, this time mainly of refugees. Between 1970 and 1985 over 2 million people fled those countries, mostly for the United States, Canada, Australia, or France, the former colonial power in that region. By 2000 the United States was home to nearly a million Vietnamese, 200,000 Laotians, and 150,000 Cambodians, as well as 50,000 Thai and 10,000 Indonesians. The Southeast Asians were part of a total Asian population of nearly 8 million in the U.S., a thirty-fold increase since 1940.

The emigrant flow from East Asia, Southeast Asia, and South Asia to the Americas, Oceania, Europe, and the Middle East continues today, as people seek better economic opportunities, political stability, or personal security, continuing a human behavior—migration—that has a long history.

Craig A. Lockard

See also Diasporas; Migrations

Further Reading

- Brown, J. M., & Foot, R. (Eds.). (1994). *Migration: The Asian experience*. New York: St. Martin's Press.
- Chan, S. (1991). *Asian Americans: An interpretive history*. Boston: Twayne.
- Cheng, L., & Bonacich, E. (Eds.). (1984). *Labor immigration under capitalism: Asian workers in the United States before World War II*. Berkeley and Los Angeles: University of California Press.
- Cohen, R. (1997). *Global diasporas: An introduction*. Seattle: University of Washington Press.
- Daniels, R. (1988). *Asian America: Chinese and Japanese in the United States since 1850*. Seattle: University of Washington Press.
- Heidhues, M. F. S. (1974). *Southeast Asia's Chinese minorities*. Victoria, Australia: Longman.
- Hein, J. (1995). *From Vietnam, Laos, and Cambodia: A refugee experience in the United States*. New York: Twayne.
- Kitano, H. H. L., & Daniels, R. (1988). *Asian Americans: Emerging minorities*. Englewood Cliffs, NJ: Prentice-Hall.
- Lee, K. H., & Tan, C. B. (Eds.). (2000). *The Chinese in Malaysia*. New York: Oxford University Press.
- Mangat, J. S. (1969). *A history of the Asians in East Africa, c. 1886 to 1945*. London: Oxford University Press.
- Masterson, D. M., & Funada-Classen, S. (2004). *The Japanese in Latin America*. Urbana: University of Illinois Press.
- McKeown, A. (2001). *Chinese migrant networks and cultural change: Peru, Chicago, Hawaii, 1900–1936*. Chicago: University of Chicago Press.
- Pan, L. (1990). *Sons of the Yellow Emperor: A history of the Chinese diaspora*. Boston: Little, Brown and Co.

Political power grows out of the barrel of a gun. • MAO ZEDONG (1893–1976)

- Pan, L. (1999). (Ed.). *The encyclopedia of the Chinese overseas*. Cambridge, MA: Harvard University Press.
- Sandhu, K. S., & Mani, A. (Eds.). (1993). *Indian communities in South-east Asia*. Singapore: Institute of Southeast Asian Studies.
- Skinner, G. W. (1957). *Chinese society in Thailand: An analytical history*. Ithaca, NY: Cornell University Press.
- Tinker, H. (1973). *The banyan tree: Overseas emigrants from India, Pakistan, and Bangladesh*. New York: Oxford University Press.
- Wang, G. (1997). (Ed.). *Global history and migrations*. Boulder, CO: Westview.
- Wang, G. (2000). *The Chinese overseas: From earthbound China to the quest for Autonomy*. Cambridge, MA: Harvard University Press.
- Wang, G. (2001). *Don't leave home: Migration and the Chinese*. Singapore: Times Academic Press.

Asoka

(c. 292–232 BCE)

MAURYAN EMPEROR

Asoka ruled the Mauryan empire in ancient India from approximately 269 to 232 BCE. The empire was established around 321 BCE by Asoka's grandfather, Chandragupta Maurya (d. c. 297 BCE), soon after the withdrawal of Alexander of Macedon (356–323 BCE) from northwestern India. With its capital at Pataliputra (modern Patna), it was an exceptionally vast, centralized, and long-lived empire. After Asoka's death, the Mauryan empire went into decline, succumbing to the Sunga dynasty in 185 BCE.

Asoka is a towering figure in India's national historical narrative and in the annals of Indian and Sri Lankan Buddhism. He is remembered primarily for his renunciation of war and violence, his conversion from Hinduism to Buddhism, his patronage of Buddhism, and his conception of a novel philosophy of moral and righteous behavior (Pali: *dhamma*; Sanskrit: *dharma*).

After a struggle for the throne, Asoka succeeded his father, Bindusara (d. 272 BCE), in 269 BCE following a four-year interregnum. He had gained administrative experience governing the provinces of Taxila and Ujjain during Bindusara's reign. The art of administration was finely developed in the Mauryan empire, as is clear from the *Arthashastra*, a treatise on statecraft by Kautilya, Chandragupta Maurya's principal adviser and minister.

As king, Asoka extended the empire territorially. Around 260 BCE he conquered Kalinga (modern Orissa). The conquest had unusual consequences. In Asoka's words: "[T]he Beloved of the Gods [Asoka] felt remorse, for, when an independent country is conquered the slaughter, death and deportation of the people is extremely grievous to the Beloved of the Gods and weighs heavily on his mind" (Thapar 1997, 255). Following the Kalinga campaign, Asoka converted to Buddhism, advocated nonviolence, and came to believe in conquest through moral suasion rather than war. It is important to note, however, that he only renounced violence once empire building was complete and almost the entire Indian subcontinent, excluding friendly kingdoms in the south, was under Mauryan sway.

Under Asoka's auspices, Buddhism developed into a major religion. At the Third Buddhist Council (250 BCE), held at Pataliputra during Asoka's reign, it was decided that Buddhism would actively seek converts. Asoka built stupas (reliquary mounds) and monasteries and sent missions to neighboring countries like Ceylon (now Sri Lanka).

A paternalistic ruler who addressed his subjects as "my children," Asoka sought to instill in them his concept of *dhamma*. This was a humanistic philosophy based on social responsibility, tolerance, and respect for all living beings. It is possible that *dhamma* served the pragmatic function of providing a unifying ideology for an exceptionally diverse and multicultural empire. Special officers were appointed to ensure the practice of *dhamma* throughout the realm. Asoka himself traveled extensively to keep abreast of happenings in his empire.

Edicts inscribed on pillars and rocks carried Asoka's word to the far reaches of his empire while he lived and left it to posterity after he died. The Asokan pillars that survive are stone monoliths, capped by animals like lions or bulls. (The capital of lions surmounting one such pillar, at Sarnath, is the national symbol of contemporary India.) It is through his edicts that Asoka has emerged as a significant historical figure from the mists of time. In 1837 James Prinsep, a British epigraphist, deciphered a pillar inscription from Delhi that referred to a king

“*Devanampiya* [beloved of the gods] *Piyadassi* [of gracious mien].” This was connected to pillar and rock inscriptions found over a large expanse of territory, from modern Afghanistan in the northwest to Bengal in the east and Mysore in the south. A single provenance was established for the inscriptions and Asoka, renowned in Ceylonese Buddhist chronicles, was identified as their author.

The edicts were written in the vernacular (mostly Prakrit but also Greek and Aramaic in the northwest). A few inscriptions were declarations of Asoka, as a lay Buddhist, to the Buddhist religious community. Most were public proclamations instructing people in the way of *dhamma* or detailing Asoka’s good works, such as the construction of hospitals and roads and the planting of shade trees.

Asoka, in the tradition of his father and grandfather, had diplomatic contacts with foreign kingdoms such as Syria, Egypt, Cyrene, Epirus, and Macedonia to the west of India and Ceylon and southern Indian kingdoms to the south. He sent missions abroad to popularize his concept of *dhamma*.

Historians have shown that accounts of Asoka’s idealism need to be tempered with a recognition of his pragmatism. His abjuring of violence was opportune, and his concept of *dhamma*, as mentioned earlier, may well have been designed to unify the diverse peoples of his empire. Nonetheless, Asoka’s name is remembered in world history for his promulgation of Buddhism and his endorsement of nonviolence.

Mandakini Arora

See also Mughal Empire

Further Reading

- Gokhale, B. G. (1966). *Asoka Maurya*. New York: Twayne Publishers.
- Keay, J. (2000). *A history of India*. London: HarperCollins.
- Thapar, R. (1997). *Asoka and the decline of the Mauryas*. Delhi, India: Oxford University Press.
- Thapar, R. (2002). *Early India: From the origins to AD 1300*. London: Allen Lane.
- Wolpert, S. (1982). *A new history of India*. New York: Oxford University Press.

Association of Southeast Asian Nations

The Association of Southeast Asian Nations (ASEAN) was founded in response to the international political turmoil of the region at the time, and especially the war in Vietnam, which threatened the stability of Southeast Asia. Its original members—Indonesia, Malaysia, Thailand, Singapore and the Philippines—felt that a unified voice would help them better manage both regional and global relationships in light of the destabilizing effect of the war. The Bangkok declaration of 8 August 1967, which established ASEAN, stated the purpose of the organization more broadly: It was to be a cooperative body along cultural, scientific, and economic lines. The principal purpose of the organization, however, was to assure the security of member nations and in particular to protect them against Communism.

A Unified Voice

By coming together in ASEAN, the countries of the region for the first time attempted a unified voice in dealing with the rest of the world. In this regard there was a sense of self-determination and an awareness of Southeast Asia as a distinct region that is important.

ASEAN’s creation coincided with historic events in other parts of the world. In 1967 the British government announced that it would withdraw its military to positions east of the Suez Canal, a policy that affected the security of Malaysia and Singapore in particular. The UK had, until this time, maintained substantial military forces in both Malaysia and Singapore, and under defense agreements guaranteed the security of the two countries. Beyond the significant economic contribution of the bases to the two economies, which had implications for the social stability of these emerging countries, they also served as a deterrent to communist insurgents, both from

You can't be a Real Country unless you have a BEER and an airline. It helps if you have some kind of a football team, or some nuclear weapons, but at the very least you need a BEER. • FRANCIS VINCENT "FRANK" ZAPPA, JR (1940–1993)

within and outside. Therefore, Britain's withdrawal made the political stability of these two countries much more uncertain. Early in 1968, following the Tet Offensive (the Communist Viet Cong's attack on thirty-six cities and towns in U.S.-backed South Vietnam), support for the Vietnam War in the United States began to wane quickly. President Lyndon Johnson left office after a single term and Richard Nixon was elected in 1969 on a platform of pulling America out of Vietnam. The Guam Doctrine of 1969 stated that the United States would give up its defense obligations in the region. In 1972 President Nixon visited the People's Republic of China, a landmark event given that the United States did not recognize the People's Republic as the legitimate government of China at that time (it established full diplomatic relations with China in 1979). Given these rapid geopolitical changes, it is not surprising that the member countries of ASEAN felt the need for mutual support and cooperation.

The Problems of Diversity

ASEAN, however, contained a fundamental flaw—a lack of homogeneity among member states—and this weakness grew more pronounced when Brunei joined in 1984, Vietnam in 1995, Laos and Myanmar (Burma) in 1997, and Cambodia in 1999. First was the diversity in ethnicity. Even in the late 1960s this was evident, with Singapore being populated predominantly by ethnic Chinese, while its neighbor to the north, Malaysia, had a majority of Malays but also a sizeable minority of ethnic Chinese. In Malaysia relations between the groups were uneasy at best and sometimes fraught with violence. Wealth in Southeast Asia tends to follow ethnic lines, with the ethnic Chinese minorities in all these countries being, generally speaking, disproportionately wealthy—another source of tension.

Second, along with the difference in ethnicity came differences in religion. While Singapore's population was Buddhist, Christian, and Muslim, the Philippines was predominantly Christian, Thailand mostly Buddhist, and Malaysia and Indonesia predominantly Muslim.

Third, there is a great difference in population size.

Today Indonesia has more than 220 million people, while the city-state of Singapore contains only about 4 million inhabitants. Malaysia has only 25 million people, while the population of Thailand is 64 million and that of the Philippines is 83 million. Therefore, in terms of related issues, such as ease of governance, political stability, and economic issues of production and consumption, the ASEAN countries vary significantly.

Finally, in the more than three decades since its founding, a substantial variation in ASEAN has emerged in terms of relative wealth. Singapore has a per capita income of more than US\$30,000, while Indonesia's is under \$700, and those of Laos, Vietnam, and Cambodia are even less. Although purchasing power parity figures reduce these differences somewhat, the fact remains that there is a tremendous difference in wealth among the ASEAN member countries, and the different economic priorities that this entails often makes it difficult to come to agreement on economic policy.

Inertia

In substantial part because of these problems of diversity and the resulting different political agendas, and in part because of its principles of noninterference and consensus in decision-making, ASEAN for many years remained a relatively weak political body. The annual meetings provided a good chance to raise issues and to discuss alternatives, but rarely could any major decisions be made. Indeed, in economic terms in particular, many of the members were in direct competition with one another, which made cooperation difficult.

Defense issues have been equally problematic. During the Cold War, Indonesia supported nonalignment, while Thailand and the Philippines had close links to the United States. There also remained a connection between Britain, Australia, New Zealand, Malaysia, and Singapore via the Five-Power Defence Arrangement. Hence, there was relatively little practical scope for defense connections, and the broad objective of ASEAN was nominally for neutrality and peace. Underlying this position was more than a little fear of one another.

ASEAN Reborn

Since the early 1990s there has been a resurgence in the relevance of ASEAN, primarily for economic reasons. Member countries' economies grew rapidly, generally speaking, from the 1970s onwards, based on a combination of foreign investment, low cost labor, political stability, and plentiful natural resources.

It is clear to ASEAN's members that globalization is a threat as well as an opportunity. With the reduction in regional and global trade barriers and increasing competition, economic change cannot be delayed. This is particularly the case in terms of the competition posed by China. Hence, in 1992 the ASEAN Free Trade (AFTA) agreement was launched, the goal of which is to achieve free trade among member nations by 2008. The ASEAN Plus Three (China, Japan, and South Korea) dialogue begun in 1999 is an attempt to bring China into ASEAN's orbit and thus to help regulate trade and investment. In 2001 the ASEAN Plus Three group agreed to work towards a free-trade agreement in 2010. The ultimate success of ASEAN is unknown, given ongoing disparities and frictions, but it appears that it is enjoying a resurgent usefulness.

Curtis Andressen

Further Reading

- Acharya, A. (2001). *Constructing a security community in southeast Asia: ASEAN and the problem of regional order*. New York: Routledge.
- Chia, S., & Pacini, M. (1997). *ASEAN in the new Asia: Issues and trends*. Singapore: Institute of Southeast Asian Studies.
- Henderson, J. (1999). *Reassessing ASEAN*. Oxford, UK: Oxford University Press.
- Luhulima, C. (2000). *Scope of ASEAN's security framework for the 21st century*. Singapore: Institute of Southeast Asian Studies.
- McGrew, A., & Brook, C. (Eds.). (1998). *Asia-Pacific in the new world order*. London: Routledge.
- Pitsuwan, S. (2001). *Future directions for ASEAN*. Singapore: Institute of Southeast Asian Studies.
- Shafie, G. (2000). *Malaysia, ASEAN and the new world order*. Kuala Lumpur, Malaysia: Penerbit Universiti Kebangsaan.
- Tan, G. (2000). *ASEAN economic development and cooperation*. Singapore: Times Academic Press.
- Tay, S., Estanislao, J., & Hadi, S. (Eds.). (2000). *Reinventing ASEAN*. Singapore: Institute of Southeast Asian Studies.
- Than, M. (Ed.). (2001). *ASEAN beyond the regional crisis: Challenges and initiatives*. Singapore: Institute of Southeast Asian Studies.

Assyrian Empire

During its heyday, between about 900 and 600 BCE, the Assyrian empire was arguably the largest and most complex political formation the world had yet seen. After its initial stage of expansion during the ninth century BCE, Assyria came to dominate the entire region that we today call the Middle East: from the Zagros Mountains in modern Iran to the eastern coast of the Mediterranean, and from the Taurus mountains in southern Turkey to the Persian Gulf. Through their imperial policies, the Assyrians became a driving force in shaping the political, cultural, and demographic makeup of the ancient Near East, setting the stage upon which much of the drama of the Old Testament was played out, and helping to preserve and transmit much of the tradition of Mesopotamian civilization to the Persian and Mediterranean worlds. In so doing, the Assyrians left an indelible mark on the development of civilization within and beyond the Middle East.

Origins and Background

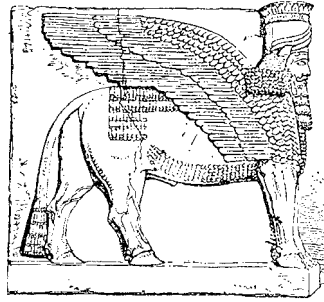
The origin of Assyria is closely related to the fortunes and misfortunes of the city of Ashur (modern Qalat Sharqat in Iraq), whence Assyria gets its name. For much of the latter half of the third millennium BCE, Ashur had been home to a northern outpost of the Sumero-Akkadian civilization emanating from the alluvial plains of southern Iraq. However, during the upheaval that marked the end of the third millennium, the site was abandoned. Assyrian historiography recorded in the Assyrian King List, which describes the earliest Assyrian kings as kings "who lived in tents," has led many scholars to the conclusion that at the beginning of the second millennium, nomadic Assyrians used the abandoned mound of Ashur as a seasonal camp, regularly performing religious rituals there. The site eventually became home to a permanent temple to Assyria's chief god (also called Ashur) leading to the settlement of what had been several dispersed nomadic groups on the already ancient mound surrounding the temple. The early political development of the Assyrian state was influenced

A sculpture of a winged bull, found often at the entrance to Assyrian temples, symbolized the fusing of mental and physical power.

by two factors: the structure of the Sumerian and Akkadian city-states of alluvial southern Iraq, and the tribal traditions of the early Assyrian nomads.

The position of Ashur, on the Tigris River some one hundred kilometers south of Mosul in northern Iraq, has distinct advantages and disadvantages. The fact that the site lies almost directly on the line below which rain-fed agriculture was not feasible in most years meant, first, that the city never had a reliable agricultural hinterland, and, second, that the Assyrian capital was located far from the important metal and lumber source areas of western Iran and southeastern Turkey. Thus, from the very beginning, the Assyrians were forced to look beyond their local environs for the resources and manpower necessary for state-building. The advantage of the location of Ashur lies in the fact that it was at the intersection of several important east-west and north-south trade routes linking highland Iran and the Persian Gulf with Eastern Anatolia and the Mediterranean.

The circumstances imposed by the location and environmental setting of the city of Ashur also influenced the development of the Assyrian state. The first segment of Assyrian history that comes into focus in the textual record is that of a commercial empire established by Assyrian merchants during the Old Assyrian period (c. 1900–1750 BCE). Although the Assyrians did not control territories beyond the general vicinity of the city of Ashur at this time, they established a vast trading network with outposts as far away as central Anatolia. Assyria first emerged as a territorial state under the Amorite king Shamshi-Adad I (reigned c. 1830–1776 BCE). Shamshi-Adad and his sons progressively extended Assyrian control until they could claim dominion over most of upper Mesopotamia (what is today Syria and northern Iraq). However, the Old Assyrian state was short-lived. Soon after the death of Shamshi-Adad, most of Assyria's former holdings were overrun by Hammurabi of Babylon (reigned c. 1792–1750 BCE). Through much of the succeeding period Assyria lived in the shadow of Kassite Babylonia and the Hurrian Empire of Mitanni. Assyria did not play a significant role on the international stage again until the reign of Ashur-uballit I (c. 1366–1330

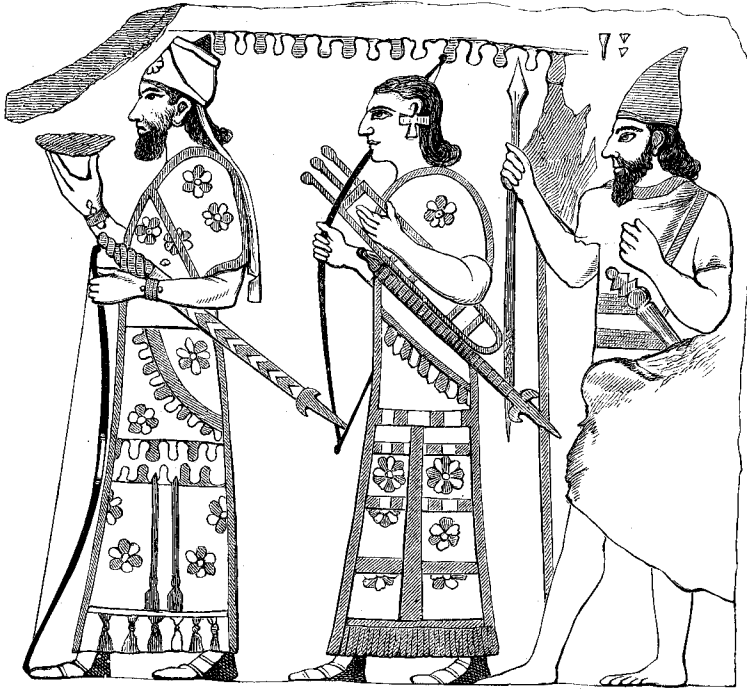


BCE), and over the next 150 years the Middle Assyrian state again came to dominate the political scene in upper Mesopotamia.

The beginnings of an imperial political structure first appeared in Assyria during this middle period. The Middle Assyrian state combined the traditions of monarchy established by Shamshi-Adad during the Old Assyrian period with the administrative structures of the Babylonians and Mitanni to create a complex political and administrative apparatus capable of maintaining a new level of political authority over vast areas of the ancient Near East. But the balance of power among the great kings of the Late Bronze Age (c. 1500–1100 BCE) began to crumble at the end of the thirteenth century BCE, leading to a period of collapse and mass migration that profoundly changed the political and demographic makeup of the region. From the rubble of the Late Bronze Age rose the Neo-Assyrian empire.

The Neo-Assyrian Empire

Neo-Assyrian imperialism built upon and surpassed the achievements of the Middle Assyrian state. The political centralization, imperial ideology, and militaristic tendencies of the Middle Assyrian state were all carried over, in one form or another, to the Neo-Assyrian system, but the scale and efficiency of the Neo-Assyrian empire was, in its time, unprecedented in world history. Assyria's new rise to prominence was the result of a complex and interrelated set of political, economic, and social factors that are difficult to sort out. The turbulent history of the region, as well as the reemergence of Babylonian and Hurrian states and the constant threat posed by the Arameans, made increased militarism a prerequisite for Assyrian survival. Inefficient farming techniques and the shortage of labor were constant problems in the Assyrian heartland. These factors, combined with the disruption of the trade routes established in the Old Assyrian period and the



A painting of a religious leader and warriors on a fragment of an Assyrian tile.

political instability of resource areas, undoubtedly made imperial expansion and political control an attractive solution to declining revenues.

Whatever the factors that caused Assyria to make the transition from state to empire, the final outcome was impressive, for Assyria was the first state to unite the diverse cultures of the ancient Near East into a single political unit.

Ashur-dan II (r. 934–912 BCE) was the first Neo-Assyrian king to conduct regular military campaigns after the turn of the millennium, and his reign is therefore considered by many to mark the beginning of the Neo-Assyrian empire. This king spent most of his energy attempting to reassert Assyrian sovereignty over territories formerly controlled by the Middle Assyrian monarchs, and in so doing he laid the foundation for the ambitious campaigns of his best-known successors, Ashurnasirpal II (r. 883–859 BCE) and Shalmaneser III (r. 858–824 BCE).

During the reign of Ashurnasirpal, Assyrian expansionism began to take on a truly imperial character. Assyrian royal ideology required Assyrian monarchs to show their strength by setting out on regular military campaigns. However, prior to the reign of Ashurnasirpal, most Assyrian military campaigns had been little more than organized raids on neighboring lands. Ashurnasirpal II altered

this tradition through the consolidation of military gains in the newly established provinces. This consolidation included the construction of provincial capitals and outposts, the establishment of a system of vassal state alliances, and the deportation and resettlement of vanquished peoples in newly conquered lands. Ashurnasirpal was also the first of a series of Neo-Assyrian kings either to relocate the imperial capital (from Ashur to Kalhu, then to Dur-Sharruken, and finally to Nineveh) or to construct a new royal palace in the existing capital to act as a new military and administrative center of the empire.

The strict organization of the Assyrian provincial system was probably undertaken during the reign of Tiglath-pileser III (r. 744–727 BCE). Tiglath-pileser, who himself had been a provincial governor and was a usurper to the throne, knew full well the dangers of allowing provincial administrators too much independence. As part of his effort to tighten the reins on Assyria's vast holdings, Tiglath-pileser III probably reorganized governmental hierarchies and established a system in which officials responsible directly to the king monitored the activities of provincial governments. Assyria's system of deportation and resettlement also reached its peak during the reign of Tiglath-pileser III, when ancient documents record tens of thousands of people being moved to and from nearly all the imperial frontiers.

The crown jewel of Assyrian military expansion came when Esarhaddon (r. 680–669 BCE) conquered the Nile delta and Egypt's original capital, Memphis. Egypt proved to be a difficult prize, however, that the Assyrians could not hold. Esarhaddon died during his second attempt to conquer Egypt, and it was up to his son Ashurbanipal (r. 668–635 BCE) to finish the job. By this point, however, considerable wrinkles had formed in Assyria's imperial plans. To begin with, premodern transportation technology made governing the far-flung provinces extremely costly, while considerable effort was spent in the attempt to subjugate Egypt. In addition to this, a civil war broke out between Ashurbanipal and his half-

Babylonian brother, who had been installed as king of Babylon by Esarhaddon.

Very few details of the last years of the Assyrian empire are preserved in the historical record. Although fall of the empire has often been referred to as a “collapse,” the momentous events marking the end of the empire were not the work of an external rival group: it was the Babylonians, along with their Median and other allies, who eventually destroyed the cities of the Assyrian heartland, including the capital at Nineveh, which fell in 612 BCE. Thus the empire was destroyed from the inside, with one of the most important groups in the ethnic mix of the empire, the Babylonians, inheriting Assyria’s holdings largely intact.

Assyria’s Legacy

The Assyrian empire is well-known from references in the Bible. Perhaps the most famous of these is to the Assyrian king Sennacherib (r. 704–681 BCE), who attacked Judah and besieged Jerusalem during the reign of Hezekiah in 701 BCE. Indeed, the Assyrian threat to the relatively insignificant state in Judah was the context in which several chapters of the Old Testament are set (Kings and Isaiah, for example); the Assyrians had a significant impact both on the world of the Old Testament and on later views of that time.

The image of Assyria as a great imperial power also reaches the modern world through art. Excavations that took place in northern Iraq during the mid- to late nineteenth century not only awakened the general public to the archaeological reality behind the Biblical stories, but filled the museums of Europe with countless Assyrian treasures. Perhaps the most famous of these Assyrian artifacts are the carved stone wall panels that once adorned the Assyrian palaces. Several studies that have attempted to reassemble the now-dispersed stone panels argue that Assyrian art and architecture served as an integrated system for the transmission of Assyrian ideology and culture. However, the historical significance of the Neo-Assyrian empire lies neither in modern perceptions of the empire, nor in the influence the Assyrians imposed on the

A New Palace for the Assyrian King

Sennacherib reigned over Assyria from 704–681 BCE. He was known both for his military victories and his passion for building great edifices. In the description below, he explains how and why he built a new palace for himself

But I, Sennacherib, king of Assyria, gave my thought and brought my mind to accomplish this work according to the command (will) of the gods. The people of Chaldea, the Arameans, the Manneans, (the people) of the lands of Kue and Hilakku, who had not submitted to my yoke, I deported (from their lands), made them carry the headpad and mold bricks. I cut down the reed marshes which are in Chaldea, and had the men of the foe whom my hands had conquered drag their mighty reeds (to Assyria) for the completion of its work.

The former palace, which was *30 gar (360 cubits)* on the side and *10 gar (120 cubits)* on its front, which the kings, who went before, my fathers, had built, whose structure they had not, however, made artistic, up to whose side the Tebiltu River had come from days of old, worked havoc with its foundation and destroyed its platform—that small palace I tore down in its totality. The course (*i.e., the channel*) of the Tebiltu I improved and directed its outflow.

Source: Luckenbill, D. D. (Ed.). (1926–1927). *Ancient records of Assyria and Babylonia*, Vol. 2 (p. 160). Chicago: University of Chicago.

creation of the early Judeo-Christian world. Rather, Assyria’s importance lies in the fact that the Assyrian state that emerged during the Mesopotamian Iron Age represented an entirely new level of political development. The Assyrians were the first true empire-builders, and it was upon their legacy that later empires, such the Persian, Greek, and Roman, were modeled.

Bradley J. Parker

See also Mesopotamia

Further Reading

- Brinkman, J. A. (1979). Babylonia under the Assyrian Empire, 745–627 BC. In M. T. Larsen (Ed.), *Power and propaganda: A symposium on ancient empires*. Copenhagen, Denmark: Akademisk Forlag.
- Brinkman, J. A. (1983). Through a glass darkly: Asarhaddon's retrospects on the downfall of Babylon. *Journal of the American Oriental Society*.
- Cogan, M. (1974). *Imperialism and religion*. Missoula, MT: Scholars Press.
- Cogan, M., & Tadmor, H. (1981). Ashurbanipal's conquest of Babylonia: The first official report—Prism K. *Orientalia*, 50(3), 229–240.
- Curtis, J. E., & Reade, J. E. (1995). *Art and empire*. New York: The Metropolitan Museum of Art.
- Grayson, A. K. (1991). Assyria. In J. Boardman, et al. (Eds.), *The Cambridge ancient history: Vol. 3. Part 2, The Assyrian and Babylonian empires and other states of the Near East, from the eighth to the sixth centuries BC*. Cambridge, UK: Cambridge University Press.
- Larsen, M. T. (Ed.). (1979). *Power and propaganda: A symposium on ancient empires*. Copenhagen, Denmark: Akademisk Forlag.
- Liverani, M. (1979). The ideology of the Assyrian Empire. In M. T. Larsen (Ed.), *Power and propaganda: A symposium on ancient empires*. Copenhagen, Denmark: Akademisk Forlag.
- Machinist, P. (1983). Assyria and its image in the First Isaiah. *Journal of the American Oriental Society*.
- Oates, J. (1986). *Babylon*. London: Thames & Hudson.
- Oates, J. (1991). The fall of Assyria (635–609 BC). In J. Boardman, et al. (Eds.), *The Cambridge ancient history: Vol. 3. Part 2, The Assyrian and Babylonian empires and other states of the Near East, from the eighth to the sixth centuries BC* (pp. 162–189). Cambridge, UK: Cambridge University Press.
- Parker, B. J. (1997). Garrisoning the empire: Aspects of the construction and maintenance of forts on the Assyrian frontier. *Iraq*, 59, 77–87.
- Parker, B. J. (2001). *The mechanics of empire: The northern frontier of Assyria as a case study in imperial dynamics*. Helsinki, Sweden: The Neo-Assyrian Text Corpus Project.
- Parker, B. J. (2003). Archaeological manifestations of empire: Assyria's imprint on southeastern Anatolia. *American Journal of Archaeology*, 107, 525–557.
- Perkova, J. (1977). The administrative organization of the Neo-Assyrian Empire. *Archiv Orientalni*, 45.
- Perkova, J. (1982). The development of the Assyrian state. In H. Klengel (Ed.), *Gesellschaft und Kultur im Alten Vorderasien*. Berlin: Akademie-Verlag.
- Perkova, J. (1987). The administrative methods of Assyrian imperialism. *Archiv Orientalni*, 55.
- Russell, J. M. (1991). *Sennacherib's palace without a rival at Nineveh*. Chicago: University of Chicago Press.
- Russell, J. M. (1999). *The writing on the wall*. Winona Lake, IN: Eisenbrauns.
- Saggs, H. W. F. (1984). *The might that was Assyria*. London: Sidgwick & Jackson.
- Stronach, D. (1997). Notes on the fall of Nineveh. In S. Parpola and R. Whiting (Eds.), *Assyria 1995: Proceedings of the 10th anniversary symposium of the Neo-Assyrian Text Corpus Project*. Helsinki, Sweden: The Neo-Assyrian Text Corpus Project.
- Winter, I. (1976). Phoenician and North Syrian ivory carving in historical context. *Iraq*, 38, 1–22.
- Winter, I. (1981). Royal rhetoric and the development of historical narrative in neo-Assyrian reliefs. *Studies in Visual Communication*, 7(2), 2–38.

Atlantic Slave Trade

See Labor Systems, Coercive; Dutch Empire; British Empire; French Empire; Slave Trades

Augustine, St.

(354–430 CE)

EARLY CHRISTIAN THEOLOGIAN

Augustine of Hippo was the dominant Christian theologian between Christian antiquity and the high Middle Ages. A prolific writer, he authored ninety-three books, hundreds of letters, and thousands of sermons. He was born in Tagaste (today Souk-Ahras, Algeria) in the Roman province of Numidia. Patricius, his father, belonged to the middle class and was a pagan. Monica, his mother, was a devout Christian who had him enrolled as a catechumen at an early age.

Augustine received his elementary and secondary education in Latin and Greek in Tagaste and Madaura. For higher studies, he was sent to Carthago, the half-pagan metropolis of Numidia. Here he formed a liaison with a woman (name unknown) with whom he lived for fifteen years and who bore him a son, Adeodatus.

Hitherto dissolute, Augustine came to a turning point about 373, when he was inspired by a reading of Cicero's *Hortensius* to seek "wisdom." Attracted by the cosmology and moral teachings of Manichaeism, he became a convert to that dualistic Gnostic religion. Nine years later, having become convinced that it lacked rationality, he abandoned it.

In 384, after about ten years of teaching rhetoric in Tagaste, Carthago, and Rome, Augustine secured an appointment as professor of rhetoric and court orator in Milan, then the capital of the Western Roman Empire. Now a widow, Monica followed him to Milan and, concerned for his spiritual and economic welfare, arranged

St. Augustine on Prayer

And how shall I pray to my God, my God and my Lord? When I pray to Him, I call Him into myself. And in me what place or room is there into which God my God should come? How should God come to me, God who made heaven and earth? Can it really be so, my Lord God, Can there be in me anything capable of containing you? Can heaven and earth contain you, heaven and earth which you made and in which you made me? Or since nothing in existence could exist without you, does it therefore follow that everything that exists must contain you? I too exist. Why then do I ask you to enter me? For unless you were in me, I could not exist. For after all I am not in Hell—and yet you are there too. For *if I go down to Hell, Thou are there*. I could not exist therefore, my God, were it not for your existence in me. Or would it be truer to say that I could not exist unless I existed in you, *of whom are all things, by whom are all things, in whom are all things?*

I came to Carthage, and all around me in my ears were the sizzling and frying of unholy loves. I was not yet in love, but I loved the idea of love, and from a hidden want I hated myself for not wanting more. Being in love with love, I looked for something to love; I hated security and a path without snares. I was starved inside me for inner food (for you yourself, my God), yet this starvation did not make me hungry. I had no desire for the food that is incorruptible, and this was not because I was filled with it; no, the emptier I was, the more my stomach turned against it. And for this reason my soul was in poor health; it burst into feverish spots which brought the wretched longing to be scratched by contact with objects of sense. Yet if these had no soul, they would certainly not be loved. It was a sweet thing to me both to love and to be loved, and more sweet still when I was able to enjoy the body of my lover

Source: St. Augustine. The Confessions. In R. Warner (Trans.), *The Confessions of St. Augustine*, 2, 38.

for his engagement to a Christian heiress. Augustine dismissed his concubine but retained their son. In his *Confessions* Augustine was to recall that separation from his mistress caused him excruciating pain.

As an imperial representative, Augustine met Ambrose, the scholarly bishop of Milan, whose sermons persuaded him that it was possible to be both a Christian and an intellectual. However, a close friendship with Ambrose did not develop, and Christian Neoplatonists in Milan were more influential in bringing Augustine to an acceptance of Christianity. In July 386, according to the dramatic account in the *Confessions*, Augustine surrendered to Christ. Resigning his professorship, and terminating his engagement with the Milanese heiress, he was baptized by Ambrose at Easter, 387. A new life dawned for Augustine, and he determined to return to Africa to establish a monastery. On their way back to Africa, Monica died and was buried in Ostia, Italy. In his *Confessions*, Augustine paid a very loving tribute to his mother.

Although Augustine loved and respected the two principal women in his life, his mother and his concubine, his writings were to reinforce early Christian antifeminism.

Augustine wrote that only men were made in the true image of God; women were in the image of God only insofar as they were wives, engaged in procreation. Women were symbols of carnality, although they too with God's grace could attain salvation.

Augustine's fame as a preacher and theologian developed after his return to Africa. In 391, while on a visit to the port city of Hippo (or Hippo Regius; today Annaba, Algeria), he had the priesthood virtually thrust upon him by the local congregation. In 396 he became sole bishop (he had been co-bishop with Valerius) and remained such until his death.

As custom then dictated, he was both chief ecclesiastical officer and civil magistrate. Indefatigable, he found time to lead a semimonastic life, attend religious conferences, and write numerous theological tracts. Original sin, grace, predestination, freedom of the will, Scripture, heresy, philosophy, history, and sexuality were among the diverse topics that engaged his attention.

Two works became classics: the *Confessions* and *City of God*. Written in 397, the *Confessions* was a book of profound psychological and spiritual insight. Though



relating some details of his childhood and adulthood, Augustine's intention was to glorify God, express repentance for his sins, and encourage others to seek God. The *City of God*, written between 414 and 427, was prompted by a shattering event, the sack of Rome in 410. In the first part of this work, Augustine set out to show that the disaster was not caused by desertion of pagan temples for Christian altars, as some Romans maintained, but by inner rot. In the second part, Augustine elucidated a philosophy of history that was linear, not cyclical. He argued that the result of the sin of Adam and Eve was the creation of two cities, two societies, the City of Man (the earthly city) and the City of God (the heavenly city). The two were not separate but intertwined, to be separated only at the Last Judgment.

In the early church Augustine was best known for combating heresy. His first fifteen years as bishop of Hippo were dominated by controversy with Donatism, a puritanical branch of Christianity that had a strong presence in Africa. In contrast with Donatist views, Augustine maintained that apostates who repented did not require rebaptism, and that the sacraments had a validity of their own, regardless of the state of grace of their administrators. After the issuance of an imperial edict, Augustine, who had sought a meeting ground with Donatist bishops, reluctantly acquiesced in the use of force against the Donatist churches. The concept of religious freedom was unknown at that time.

Other teachings that Augustine struggled against were Manichaeism, which he knew from personal experience, and Pelagianism. A recent arrival into Africa, Pelagianism denied that original sin had totally vitiated human nature. In opposition to this thesis, Augustine contended that the sin of Adam and Eve, passed on to all of posterity, had alienated human persons from God and therefore reconciliation could be achieved only by baptism.

Augustine died 28 August 430 during the Vandal siege of Hippo. A cult of Augustine spread quickly in Europe, and his canonization was not the result of any papal procedure (none existed at the time) but of popular acclaim. In 1295 Pope Boniface VIII proclaimed Augustine a doctor of the church.

Augustine's influence on western Christianity was unparalleled until Thomas Aquinas appeared in the thirteenth century. Augustinianism with its Platonic overtones gave way to Scholasticism with its Aristotelian underpinnings. During the Reformation era, Luther and Calvin revived Augustinian ideas regarding predestination. In more modern times Augustine's influence may be found in the works of Blaise Pascal, Jacques Maritain, and Joseph Ratzinger, among others, as well as in some of the documents of Vatican II. Though a man of his time in most matters, Augustine as a theologian and philosopher showed independence and originality.

Elisa A. Carrillo

See also Catholicism, Roman

Further Reading

- Augustine. (1958). *City of God* (G. G. Walsh, et al., Trans.). New York: Doubleday Image.
- Augustine. (2001). *The confessions* (R. Warner, Trans.). New York: Signet Classic.
- Brown, P. (1967). *Augustine of Hippo*. Berkeley: University of California Press.
- O'Donnell, J. J. (1985). *Augustine*. Boston: Twayne.
- Wills, G. (1999). *Saint Augustine*. New York: Viking Penguin.
- Wills, G. (2002). *Saint Augustine's memory*. New York: Viking Penguin.

Augustus Caesar

See Caesar, Augustus

Aurangzeb

(1618–1707)

RULER OF MUGHAL INDIA

Muhi-ud-Din Muhammad Aurangzeb 'Alamgir was the last of the great Mughal emperors, rulers of much of present-day South Asia from 1526. Although Aurangzeb displayed military talent, administrative acu-

Faith is to believe what you do not see; the reward of this faith is to see what you believe. • SAINT AUGUSTINE (354–430)

men, and political tenacity over the course of a forty-nine-year-long reign (1658–1707), his legacy was an ambiguous one. While Aurangzeb succeeded in pushing the Mughal empire's frontiers to their furthest limits, the ceaseless warfare that this entailed exhausted the empire and degraded its administrative machinery. Aurangzeb's attempts to refashion an inclusive Mughal political ideology and culture along Islamic lines also opened political and religious fissures within the Mughal polity that his successors were unable to surmount.

Aurangzeb's early military success led his father (crowned as Emperor Shah Jahan in 1628) to appoint him governor of the Deccan, in the center of the subcontinent, in 1636. After serving in that capacity until 1644, Aurangzeb served as governor of Gujarat (1645–1647) in the west, Multan (1648–1652) in present-day Pakistan, and, for a second time, the Deccan (1652–1658). He also commanded imperial expeditions against Balkh (1646) and Kandahar (1649 and 1652) in what is now Afghanistan. Cumulatively, these assignments allowed Aurangzeb to build a reputation as a skillful general and an energetic administrator.

Aurangzeb's eldest brother and primary political competitor, Dara Shikoh, viewed his rising fortunes with particular alarm. By the mid-1650s the imperial family had effectively fractured; whereas Aurangzeb's other brothers—Shuja and Murad Bakhsh—allied themselves with Aurangzeb, Shah Jahan sided with Dara Shikoh. Tensions finally culminated in a bitter fratricidal conflict when Shah Jahan was taken ill in the fall of 1657. Over the next year, Aurangzeb emerged as the new Mughal emperor, overcoming military challenges by all his brothers and dethroning his father (who died under house arrest in 1666).

From the onset of his reign, Aurangzeb set the Mughal empire on an aggressively expansionist course. In addition to campaigns against Bijapur (1660–1661, 1665–1666) in the west, Mughal armies moved against Palamau in Bihar (1661), Cooch Behar and Assam (1661–1663) in the northeast, and Arakan, presently divided between Bangladesh and Myanmar (1664). In subsequent decades Aurangzeb conquered the Deccan sul-

tanates of Bijapur (1686) and Golkonda (1687) and extended Mughal authority over most of southern India. Aurangzeb's military record nevertheless was a mixed one. Besides, no lasting gains in Assam the Mughals were unable to crush the military challenge posed either by the Maratha rebel Sivaji (d. 1680) or his successors in the Deccan, even though Aurangzeb took personal charge of field operations after 1681 and succeeded in capturing and executing Sivaji's son and successor, Sambhaji, in 1689. Ultimately, decades of continuous warfare against the Marathas stymied the consolidation of imperial control over the south, led to plummeting morale within Mughal ranks, and corroded the longstanding aura of Mughal military invincibility.

Aurangzeb's lifelong interest in military affairs was matched by attempts during the initial decades of his reign to improve the Mughal administrative machinery. This was especially true with regard to the collection of land revenue taxes, the cornerstone of Mughal finances. Intensifying imperial pressure on local landholders, however, catalyzed a series of anti-Mughal revolts among various groups from 1669 through 1697. By the 1690s, Aurangzeb's preoccupation with the war in the Deccan and increasing political instability resulted in weakening imperial oversight with severe long-term implications for the financial viability of the empire.

After he became emperor, Aurangzeb zealously—and often shortsightedly—defended his own imperial prerogatives. Two examples stand out. First, Aurangzeb willingly triggered a massive rebellion among the Rajputs, between 1679 and 1681, in order to protect his right to place a candidate of his choosing on the throne of Marwar (Jodhpur). Aurangzeb's actions are significant because they permanently alienated many Rajputs, who had previously ranked among the Mughal dynasty's strongest supporters. Second, all of Aurangzeb's five sons suffered the ignominy of severe reprimands, incarceration, or permanent exile after dissenting against various imperial policies. After the late 1680s, Aurangzeb also bypassed his sons in favor of a coterie of noble loyalists. In so doing, Aurangzeb ended up fatally undermining the authority of his imperial successors.

Ultimately, however, Aurangzeb is best known for his attempts to conform imperial policies to a narrow interpretation of Islamic scriptures while simultaneously pursuing actions that favored his Muslim subjects. Aurangzeb's more controversial gestures included empowering public censors to enforce Islamic injunctions on morality (1659), imposing double customs duties on non-Muslim traders (1665), ending imperial patronage of music and the arts (1660s), reimposing the *jizya* (a poll tax on non-Muslims, 1679), and making imperial land grants to Muslim clerics transferable and hereditary (1690) while denying Hindu religious figures access to those grants. Aurangzeb's actions seem to have been informed by a combination of personal zeal and political calculation that demanded shoring up his support among various powerful Muslim constituencies. Aurangzeb's initiatives marked a critical—if occasionally only symbolic—departure from the religiously inclusive and tolerant policies followed by Mughal emperors over the previous century.

Aurangzeb's died of old age in February 1707. A bitter war of succession between his three surviving sons followed. Mu'azzam (crowned as Bahadur Shah) emerged victorious and immediately set about reversing many of his father's policies.

Munis D. Faruqi

See also Mughal Empire

Further Reading

- Ali, M. A. (1997). *The Mughal nobility under Aurangzeb*. New Delhi, India: Oxford University Press.
- Faruki, Z. (1972). *Aurangzeb and his times*. Delhi, India: Idarah-I Adabiyat-I-Dilli.
- Habib, I. (1999). *The agrarian system of Mughal India*. New Delhi, India: Oxford University Press.
- Hallisey, R. C. (1977). *The Rajput rebellion against Aurangzeb: A study of the Mughal empire*. Columbia: University of Missouri Press.
- Hardy, P. (1976). Commentary and critique. *Journal of Asian Studies*, 35(2), 257–263.
- Pearson, M. N. (1976). Shivaji and the decline of the Mughal empire. *Journal of Asian Studies*, 35(2), 221–235.
- Richards, J. F. (1975). *Mughal administration in Golconda*. Oxford, UK: Clarendon Press.

Richards, J. F. (1976). The imperial crisis in the Deccan. *Journal of Asian Studies*, 35(2), 237–256.

Richards, J. F. (1993). *The Mughal empire*. Cambridge, UK: Cambridge University Press.

Sarkar, J. (1972–1974). *History of Aurangzib* (Vols. 1–5). Bombay, India: Orient Longman.

Austro-Hungarian Empire

In 1867 an *Ausgleich* (compromise) transformed the monarchy of the Habsburg ruling house of Europe, which had existed since 1526, into the dual state of Austria-Hungary. Count Friedrich Ferdinand von Beust (1809–1886), the Austrian foreign minister, and Count Gyula Andrássy (1823–1890), a prominent Hungarian nobleman, conducted the final negotiations of the compromise. The then ruling Emperor of Austria, Franz Joseph (reigned 1848–1916), viewing his lands essentially in terms of *Hausmacht* (the maintenance of dynastic power and prestige), sought to avenge losses suffered during the Italian War of 1859 and the Austro-Prussian War of 1866, which had stripped the monarchy of its territories in Italy and undercut its position in Germany. A continuation of the struggle against Prussia, however, required Hungarian cooperation. Hungarian leaders, determined to control non-Magyar (the dominant people of Hungary) populations in their part of the monarchy, wanted to remain connected to a great European state under conditions that maximized Hungary's autonomy within the larger whole.

The Nature of the Dual Monarchy

Extended consultations produced a compromise between the dominant Austro-Germans and the Magyars. The *Ausgleich* in effect created two distinct states, each organized

Liberty not only means that the individual has both the opportunity and the burden of choice; it also means that he must bear the consequences of his actions . . . Liberty and responsibility are inseparable. • FRIEDRICH VON HAYEK (1899–1992)

as a constitutional dual monarchy. Franz Joseph and his successors would tie together the two independent and equal states by functioning as emperor of Austria and king of Hungary. The Habsburg ruler would appoint common ministers of finance, foreign affairs, and war as well as the ministries of the separate states, thereby preserving dynastic authority over the joint armed forces and the conduct of foreign policy. Delegates from the respective parliaments would meet on a rotating basis in Vienna and Budapest to settle matters of shared concern. The *Ausgleich* soon led to the creation of unified monetary and postal systems, a central bank, an integrated railroad network, and a customs union sheltered behind a single tariff.

Despite the ramshackle character of the dual monarchy, governmental structures functioned with surprising efficiency and allowed Austria-Hungary to retain its status as an important counterweight in the European power balance. However, in an age when nation-states had become the paramount form of political organization in the Western world and when the colonial possessions of the United States, Japan, and a small circle of European countries were becoming the dominant mode of imperial organization, Franz Joseph's empire represented an anachronism as potentially unsettling to continental stability as it was itself endangered by internal tensions and conflicts. For reasons resembling the failure of the new U.S. republic to confront the question of slavery at the time of its founding, those leaders who negotiated the *Ausgleich* did nothing to resolve the nationalities problem facing the dual monarchy.

The *Ausgleich* used the River Leith to divide Franz Joseph's possessions. The empire of Austria (Cisleithania) contained Germans located primarily along the Danube River and in the Alpine areas of the old hereditary lands (*Erblande*), Slovenes in the provinces to their south, Czechs in the Bohemian Crown lands, Poles, Ruthenians (Carpatho-Ukrainians), large concentrations of Jews in Galicia, and Romanians in Bukovina. Italians inhabited the south Tyrol and the Adriatic coast. In the other part of the dual monarchy, Magyars lived on the plains tra-

versed by the Danube and Tisza Rivers and in eastern Transylvania. Slovaks lived to their north, Croats and Serbs to their south. Bosnia-Herzegovina contained substantial numbers of Muslims. In addition to pockets of Germans scattered throughout the kingdom of Hungary, Romanians occupied much of Transylvania. Nowhere did ethnic patterns coincide with historic borders, and nowhere could boundary lines be drawn that did not divide peoples of common descent who spoke the same language and shared a cultural heritage. Both the Germans and the Magyars constituted less than one-half of the population in the areas of the dual monarchy where the *Ausgleich* had ensured their predominance. The Germans, like the Poles, Ruthenians, Romanians, Serbs, and Italians, were developing emotional ties with peoples of their own nationality inhabiting lands lying beyond the dual monarchy's borders.

Sources of Imperial Strength

Despite its lack of geographical cohesion and the centrifugal (tending away from centralization) forces of nationalism, Austria-Hungary managed to survive until military defeat in World War I finally precipitated its disintegration. The attachment that many of Franz Joseph's subjects exuded for their emperor-king made him an indispensable source of stability. His long reign, venerable family heritage, steadfast demeanor, and unwavering commitment to his responsibilities elicited widespread devotion and support. Loyalty to this embodiment of the multinational Habsburg state remained strong in the armed forces, which imparted useful skills and broadening life experiences to soldiers and sailors of diverse backgrounds. Dedication to duty likewise remained high in the civil service, where bureaucrats played an increasingly influential role in society. The Roman Catholic Church, although diminishing in power, as well as the landed aristocracy throughout the empire, continued to pledge firm allegiance to the Habsburg dynasty.

Economic development provided another source of unity for Austria-Hungary. The growth of industry, notably

Expansion and Contraction of European Empires

15 TH CENTURY	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus “discovers” the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16 TH CENTURY	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is “discovered” by Vasco Nuñez de Balboa of Spain.
	Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
17 TH CENTURY	France establishes a presence in West Africa.
	Portugal’s dominance in East Africa and Asia begins to decline.
	The English, Dutch, and French charter trading companies.
	The English settle Jamestown in Virginia.
18 TH CENTURY	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
	France loses American colonies and territory to England and Spain.
	The English lose control of their American colony.
19 TH CENTURY	The Dutch Republic becomes a colonial power with the abolishment of its private trading companies.
	The Dutch begin to lose most of their colonies to the British.
	The Spanish empire declines.
	By the time of the Treaty of Paris in 1763, England has become the dominant European colonial power.
20 TH CENTURY	France under Napoleon regains territory in the Americas.
	Haiti gains freedom from France through a slave revolt.
	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
20 TH CENTURY	The Habsburg empire is transformed into the Austro-Hungarian empire.
	The German empire is established after the Prussian defeat of France.
	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonies in Africa.
20 TH CENTURY	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
20 TH CENTURY	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese-speaking nations.
20 TH CENTURY	The Russian-Soviet empire disintegrates.

the rising output of porcelain, textiles, and armaments in Bohemia, complemented the agricultural productivity of Hungary. The construction of railroads, expansion of banking, integration of regional markets—and therefore interdependence of various regions—all reinforced the dual monarchy's economic interaction. On the other hand, the spread of industrialization intensified nationality problems, and growing numbers of impoverished peasants, driven by demographic pressures, streamed into the larger cities, accelerating the urbanization of society.

Vienna, whose inhabitants had numbered around 400,000 in 1848, mushroomed into a metropolis of 1.6 million by 1914. A once-predominantly German population became extraordinarily diverse ethnically, linguistically, socioeconomically, and culturally. As in other urban centers of the dual monarchy, such diversity probably contributed to its flourishing intellectual and artist life. Late nineteenth-century Vienna nurtured the work of Arnold Schoenberg and Gustav Mahler in music, Arthur Schnitzler and Hugo von Hofmannsthal in literature, Gustav Klimt and Egon Schiele in painting, as well as Sigmund Freud in psychiatry. Its university boasted world-renowned figures in fields ranging from history and philosophy to economics, medicine, and law. Despite its splendor, however, Vienna could not avoid the divisions and strife that came with its size and diversity. Here, as elsewhere in Franz Joseph's domains, national consciousness and accompanying feelings of grievance became more acute whenever economic expectations, educational levels, and degrees of social sophistication rose significantly.

Developments in Austria

Pervasive nationality problems invariably complicated other political problems. Although the Austrian constitution guaranteed many basic rights, including the right of every national group to uphold its own language, religion, and culture, the right to vote operated through a class system designed to ensure the dominance of Germans in parliament. Immediately after 1867, a period of liberal ascendancy under Franz Joseph's prime minister, Prince Carlos Auersperg (1814–1890) brought a series of reforms that broadened trial by jury, introduced free

and compulsory elementary education, diminished the influence of the Catholic Church over education and its control over marriage and family law, established universal military service, reduced the severity of the penal code, outlawed discrimination against Jews, and accorded all Christian faiths legal equality.

The creation of the German empire by Prince Otto von Bismarck after the Prussian defeat of France in 1871 dashed Franz Joseph's aspirations to reassert Habsburg dominance in central Europe. Fears of losing Austria's German-speaking lands to the newly united Germany brought to power a more conservative ministry under Count Karl Sigismund von Hohenwart (1824–1899). It attempted to appease the Slavic population by reorganizing the empire on a federal basis. Efforts to give the Czechs a status equal to that of the Magyars met with unyielding resistance from the two master nationalities, but the Hohenwart ministry did ensure the adherence of Galicia's Poles by granting them administrative and cultural autonomy. Another liberal ministry led by Prince Adolf Auersperg (1821–1885) introduced the direct election of parliamentary representatives, which resulted in a Czech boycott because the reform favored urban and hence German voters.

Prolonged economic depression, political corruption, and liberal opposition to a foreign policy now directed by Andrassy compelled Franz Joseph to name Count Eduard Taaffe (1833–1895), a conservative Bohemian aristocrat, as his chief minister in 1879. Taaffe organized a political coalition of Slavs, clericals, and German conservatives known as "the iron ring." He achieved stability by making concessions to his supporters without ever addressing their deepest discontents or resolving severe fiscal problems facing the Austrian government. Recurring political crises followed his resignation in 1893. The attempt to diminish opposition among aggrieved minorities with an election law that provided universal manhood suffrage failed to restore order to the parliamentary process.

The Position of Hungary

In their part of the dual monarchy, Hungarian leaders proved unable and often unwilling to address the grievances of subject peoples. Magyar landowners dominated

In framing a government which is to be administered by men over men, the great difficulty lies in this: You must first enable the government to controul the governed; and in the next place, oblige it to controul itself. • JAMES MADISON (1751–1836)

the political process and utilized their power to assimilate or subjugate the other nationalities through relentless efforts at Magyarization. Only Croatia possessed a degree of administrative autonomy that gave its peoples their own diet, courts, and schools. Kalman Tisza (1830–1902), head of the Liberal Party and prime minister from 1875 to 1890, sought to uphold the *Ausgleich* while enhancing Hungary's position within the dual monarchy. A resurgent Independence Party under the direction of Ferenc Kossuth (1841–1914) assumed control of the government in 1890 and complicated relations with Austria until 1910 by pressing for a virtually separate Hungary. Istvan Tisza (1861–1918), who served as prime minister from 1903 to 1905 and again from 1913 to 1917, revised the Hungarian agenda. Determined to uphold the *Ausgleich*, he still increased his country's prerogatives and influence whenever possible.

Foreign Affairs

Unremitting internal difficulties encouraged the leaders of Austria-Hungary to pursue an expansionist foreign policy. For reasons of dynastic prestige, military security, and economic advantage, the imperial and royal army occupied the Turkish provinces of Bosnia and Herzegovina in 1878. This occupation counterbalanced the recent loss of territory in Italy and alleviated fears that an intensifying South Slav *irredenta* aimed at the inclusion of Croatia and Slovenia in an independent Slavic state, and the political aspirations of Serbia, which sought to become the center of this imagined state, might unsettle minorities living within the dual monarchy. However, the occupation complicated relations with Serbia, Italy, and Russia, which itself had ambitions in the Balkans, and pushed Austria-Hungary into a defensive alliance with Germany the following year.

The dual monarchy aroused heightened resentments when it formally annexed Bosnia and Herzegovina in 1908. The annexation raised serious questions in every European capital concerning Austria-Hungary's intentions in the international sphere and increased its dependence on Germany, which had provided crucial if reluctant support. The annexation weakened the Triple

Alliance, consisting of Germany, Austria-Hungary, and Italy, by alienating Italy and reinforced Russia's commitment to the Triple Entente, which by 1907 had diplomatically tied Russia to England and France. By provoking further Serbian agitation among the dual monarchy's South Slavs, the annexation ensured further trouble in southeastern Europe. Two Balkan wars during 1912–1913 left Serbian territorial aspirations unfulfilled, an outcome for which Serbian nationalists held Austria-Hungary responsible. Then, on 28 June 1914, young Bosnian extremists with connections in the Serbian capital of Belgrade assassinated Crown Prince Franz Ferdinand and his wife in Sarajevo, the Bosnian capital.

Consequences of World War I

When the Austro-Hungarian government, believing its very existence to be at stake, declared war on Serbia on 28 July, Russia's backing of Serbia and Germany's support of Austria-Hungary, its only reliable ally, set off a series of general mobilizations that quickly turned a Balkan crisis into a European war. During the opening campaigns the imperial and royal army of Austria-Hungary suffered nearly 50 percent casualties and lost many of its experienced officers. Yet, loyalty to Franz Joseph and his multinational dual monarchy remained strong. Victories in Italy, Serbia, and Romania restored morale but could not prevent mounting hardships within the civilian population. Centralization demanded by the war effort left effective authority in the hands of soldiers and bureaucrats. Subsequent military setbacks, restrictions on individual rights, mounting shortages, and an inescapable dependence on Germany rekindled nationalist animosities and ambitions throughout Austria-Hungary.

The last Habsburg emperor-king, Karl I (reigned 1916–1918), failed in his attempts to make a separate peace with Allied leaders in France and England, who belatedly recognized the need to break up his empire after victory had been won. The collapse of offensives mounted by Germany and Austria-Hungary during the spring and summer of 1918 paved the way for an abrupt disintegration of the dual monarchy. In October the

leaders of various national groups used Allied recognition to declare the independence of Czechoslovakia, Yugoslavia, and an expanded Romania. Territorially reduced states of Austria and Hungary set up republican governments after the resignation of Karl I in mid-November. Galicia became part of a new Poland. The end of the monarchy that the Habsburg dynasty had ruled for nearly four hundred years left small successor states facing a host of long-standing nationality conflicts in a now deeply divided east-central Europe.

John A. Mears

Further Reading

- Bled, J. P. (1992). *Franz Joseph*. Oxford, UK: Blackwell.
- Good, D. F. (1984). *The economic rise of the Habsburg empire*. Berkeley and Los Angeles: University of California Press.
- Jaszi, O. (1929). *The dissolution of the Habsburg monarchy*. Chicago: University of Chicago Press.
- Johnston, W. M. (1972). *The Austrian mind: An intellectual and social history, 1848–1938*. Berkeley and Los Angeles: University of California Press.
- Kann, R. A. (1977). *A history of the Habsburg empire, 1526–1918*. Berkeley and Los Angeles: University of California Press.
- Kann, R. A. (1977). *The multinational empire: Nationalism and national reform in the Habsburg monarchy, 1848–1918*. New York: Octagon.
- Kann, R. A. (1991). *Dynasty, politics, and culture*. Boulder, CO: Social Science Monograph.
- Kontler, L. (2002). *A history of Hungary*. New York: Palgrave.
- Macartney, C. A. (1969). *The Habsburg empire, 1790–1918*. London: Macmillan.
- May, A. J. (1960). *The Habsburg monarchy, 1867–1914*. Cambridge, MA: Harvard University Press.
- Rudolph, R. L., & Good, D. F. (Eds.). (1992). *Nationalism and empire*. New York: St. Martin's Press.
- Sked, A. (1989). *The decline and fall of the Habsburg empire 1815–1918*. London: Longman.
- Sugar, P. F. (Ed.). (1990). *A history of Hungary*. Bloomington: Indiana University Press.

Automobile

The automobile in many ways has been one of the defining technologies of the last one hundred years. From its roots as a European technological curiosity to its reinvention as a mass consumer product in the early twentieth-century United States to its current status as the

product of the largest manufacturing activity on earth, the automobile has fundamentally changed the world economy and the lives of most people, even those people who do not drive.

Most people think of the automobile as the invention that welcomed the twentieth century with a blast of exhaust smoke. However, the earliest cars, a strange blend of the eccentric and the practical, were built long before people such as Gottlieb Daimler (1834–1900), Henry Ford (1863–1947), Ransom Olds (1864–1950), Carl Benz (1844–1929), William Durant (1861–1947; founder of General Motors), James Packard (1863–1928), and Clement Studebaker (1831–1901) drove onto the scene. During the fifteenth century the Italian artist and engineer Leonardo da Vinci thought about carriages that could move under their own power and left drawings showing rudimentary transmission and steering systems. In 1510 the German Renaissance painter Albrecht Durer sketched a complex and undoubtedly heavy royal carriage, propelled by muscle power through geared cranks.

The early history of the automobile gives little indication of the long-range impact of its technology. Beginning in Europe during the 1870s, research and invention led to development of the first gasoline-powered automobiles in the 1880s. The international character of automobile enthusiasts and inventors during the late nineteenth and early twentieth centuries is representative of the scientific and technological culture, where news traveled quickly between continents.

At the heart of any car is its engine, and the development of the internal combustion engine was pursued separately from and earlier than that of the automobile. Initial research into internal combustion engines was motivated by desires to improve on the efficiency and portability of the steam engine.

Full Steam Ahead

Until the first practical internal combustion engine was developed in 1860, constructing a workable steam car was the obsession of scientific geniuses and eccentrics, most of whom received only scorn and laughter for their trouble. Historians can only imagine the scene in Paris in



A precursor to the automobile, a wheelbarrow with seats propelled by human power in nineteenth century China.

1769 when Nicholas Cugnot (1725–1824), a French military engineer serving Empress Maria Theresa of Austria, retired from active duty and began working, under royal commission, on his idea for a steam-powered military truck. The truck may have been capable of only 11 kilometers per hour, but it did move. This, the world's first automotive test drive, sufficiently shook loose royal purse strings to fund a second and larger model. Cugnot's second truck had front-wheel drive, with the boiler hanging off the nose, a design that resulted in such an unbalanced weight distribution that a driver could barely steer the vehicle.

FOLLOWING IN CUGNOT'S TRACKS

After Cugnot the scene shifted to England, where the significance of the technical breakthroughs was met by public apathy. After all, who could imagine that these outlandish contraptions, easily outrun by even the slowest horse, could be practical?

James Watt (1736–1819), the Scottish inventor whose technical innovations made the Age of Steam possible, was granted a patent for a steam carriage in 1786 but did not actually build it. Watt was so afraid of explosions

from high-pressure boilers that he had a covenant written into the lease for any potential tenants of his home, Heathfield Hall, stipulating that no steam carriage could approach the house.

In the United States steam pioneers faced ridicule and censure, too. Oliver Evans (1755–1819) is not well remembered today, but he built the first self-propelled vehicle in the United States—and it also *swam*. Evans also built the first high-pressure boiler in the United States and created an automation system for a grain mill that prefigured Henry Ford's assembly-line system by 150 years.

OBSTACLES TO THE DREAM OF STEAM

Inventors struggled to make their fire-belching vehicles practical, and English entrepreneur Walter Hancock was the first to offer regular passenger routes of the type that Evans imagined. For five months at some time during the period 1824–1836 Hancock had nine steam coaches taking on paying customers. However, Hancock's revolutionary coach service didn't attract enough passengers, and it failed. One would probably be going too far to say a conspiracy killed the steam coaches, but certainly the powerful railroad interests threw some spikes onto the road. As automotive writer Ken Purdy reports in his classic book *Kings of the Road*: "The railroads of the day took a very dim view indeed of the kind of competition steam coaches obviously could offer, and arrangements to make things difficult for the upstarts were not hard to contrive. A four-shilling toll-gate charge for horse-drawn coaches, for example, could easily be raised to two pounds and eight shillings for a steam coach" (Purdy 1949, 196).

Steam carriages during the next half-century would make their mark, particularly in the United States. Government Indian agent Joseph Renshaw Brown commissioned one particularly innovative model, shaped like a

railroad locomotive, to carry supplies and food to isolated bands of Sioux before the Civil War, although the bad roads in the hinterlands of Minnesota made the carriage impractical. Brightly painted steam fire engines were more successful in several cities after the war. Steam cars survived the onslaught of internal combustion during the first decade of the twentieth century, and brands such as “Stanley,” “Locomobile,” and “White” had many admirers who loved the cars’ range, silent operation, and absence of a crank handle (a necessity for an internal combustion engine in the days before electric starting). This latter advantage was a prime consideration in an era when misapplied cranking could break one’s arm.

However, Whites and Stanleys could require half an hour to work up a head of steam, frightened people who read accounts of boiler explosions, and consumed great amounts of wood fuel and water. When rapid technological advancements improved the gasoline engine after 1905, the market for steam cars evaporated.

Current Events

Electric cars developed out of early experiments with electric trains and trolleys and became possible only with the invention of the practical storage battery in 1859. A three-wheeled carriage made by Magnus Volk of Brighton, England, in 1888, may have been the first true electric car.

In the United States electric cars first made a discernible impact through their use as taxis, particularly in New York City. By 1898 the Electric Carriage and Wagon Company had a fleet of twelve electric cabs—with well-appointed interiors able to accommodate gentlemen in top hats—plying the city streets. Drivers, as in contemporary horse carriages, sat outside on a raised platform.

The electric car gradually won acceptance through such small-scale, successful businesses. By 1900 U.S. drivers could choose their form of locomotion, and at the first National Automobile Show, held that November in New York City, patrons overwhelmingly chose electric as their first choice. Steam was a close second. Gasoline ran a distant third, receiving only 5 percent of the vote. That year 1,681 steam, 1,575 electric, and only 936 gasoline cars were manufactured.



UNPLUGGED

The self-starter for internal combustion cars—the device that largely killed the electric car as a viable product—was, like the electric car itself, first marketed to women. A 1911 ad from the Star Starter Company (“Any Woman Can Start Your Car”) featured a bonneted woman sitting at the wheel of a crankless gas buggy. By “cranking from the seat, and not from the street,” she was neutralizing one of the last major advantages that early electric cars had.

RECHARGED?

Electric cars have made sporadic reappearances, mostly in response to fuel crises such as the oil embargo by the Organization of Petroleum Exporting Countries (OPEC) in 1973. However, most electric cars have been underdeveloped conversions, such as the utility-endorsed Henney Kilowatt of 1959 to 1961, which started life as a French Renault Dauphine gasoline-powered car. About 120 Henneys were built, which is a good run for a post-war electrical vehicle (EV).

The Gas-Powered Automobile

In 1860 the Belgian inventor J. J. E. Lenoir invented a gas engine that was similar to James Watt’s double-acting steam engine, except that when the piston raised, it drew a mixture of coal gas and air into the cylinder. The mixture was ignited by an electric spark. Lenoir’s engine, although plagued by overheating, was a commercial success. The market for gas engines opened, and similar inventions followed, the most important of which was the gas engine of the German inventor Nicolas Otto, who patented his engine in 1866 and exhibited it at the Paris Exhibition of 1867, where it won a gold medal. Otto’s engine, unlike Lenoir’s engine, compressed the gas before igniting it, with the small detonation pushing the piston up and forming a near vacuum under it. Otto’s engine weighed nearly a ton and produced all of two horsepower. However, the piston was vertical and occupied a small space, making it practical in workshops that were too small for a steam engine. Otto’s engine was an immediate success, and his company was soon overwhelmed

Thanks to the [U.S.] Interstate Highway System, it is now possible to travel from coast to coast without seeing anything. • CHARLES KURALT (1934–1997)

by six thousand orders during the next five years. By 1869 Otto was licensing the invention for production in the United States, Britain, France, and elsewhere. However, his engines required gas mains to carry the gas to the engines; therefore, they were not portable in the sense that a liquid-fuel engine would be.

The internal combustion engines of the 1870s required gas to be compressed and ignited—properties not possible with liquid fuel. The invention that made liquid fuel usable was the carburetor, a device that vaporizes gasoline and makes it possible to be compressed and then ignited. The carburetor was the first product of the company formed by Wilhelm Maybach and Gottlieb Daimler of Germany. By 1885 the two men had attached their gasoline engine to a bicycle to produce the world's first motorcycle. In 1886 they attached their engine to a carriage to produce an automobile. In 1890 they formed the Daimler Motor Company to manufacture automobiles. In addition, they sold their engines to Peugeot carriage company in France. At the other end of the spectrum, in 1892 the German engineer Rudolf Diesel applied for a patent on a more powerful double-acting, liquid-fuel engine. His engine compressed air to heat it to the fuel's ignition point, then introduced the fuel, which instantly ignited, producing power without further heating of the air. Diesel's principle led to a more efficient, more powerful engine that ran on a less refined product of petroleum oil than gasoline—a fuel now called “diesel.” Diesel wanted to challenge the steam engines used in ships and locomotives—a goal he reached by the turn of the century.

Heavy Traffic

Automobiles were a common sight in European and U.S. cities by the twentieth century. However, to become a worldwide phenomenon, automobiles needed to be less expensive and more usable. Although several inventors focused on making the automobile accessible to the masses, people associate the milestone of making the world's first “motor car for the great multitude” with Henry Ford. Although the Model T was not his first automobile design by any means, Ford began designing it in

1907 with the goal of making a utilitarian car affordable by the U.S. middle class—and in the process redefining that middle class through car ownership. The Model T rolled out in 1908 at a price of \$850, advertised as the car “even you can afford.” However, the 1908 Model T was neither the world's least expensive car, nor the one produced in the largest numbers. For the Model T to capture a mass market, Ford had to revolutionize how it was produced. This he accomplished with what Ford called “mass production.” In 1913 Ford opened a plant in the Highland Park area of Detroit, where he installed his first assembly line. Assembly lines and production by machines required fewer skilled laborers. Ford's new production methods changed the character of industrial labor and attracted foreign-born workers, particularly from eastern and southern Europe and the Middle East. In order to retain his employees in this machine-based, repetitive work, Ford doubled their daily wage to five dollars and reduced their working day to eight hours. Ford's mass production techniques led to cheaper (as low as \$360 in the 1920s) and more numerous Model Ts.

Ford was producing more than 1 million Model Ts by 1920. The amount of materials required to produce that many automobiles had a ripple effect across the world's economy and environment. The demand for commodities such as rubber and oil increased rapidly—creating new socioeconomic dynamics in areas such as Brazil and the Dutch East Indies, where rubber plantations proliferated. In addition, the role of the automobile in warfare, as proven during World War I, had brought a new emphasis in securing these commodities through imperial systems in the Middle East, Africa, and southern Asia. Demands for enough rubber, oil, and steel to produce and operate millions of automobiles also changed the world's environment: Steel mills belched smoke into the air from Pennsylvania to the Ruhr valley in Germany to India, and millions of acres of tropical forests were cleared to plant rubber trees. Oil derricks sprouted from the California coast to the Middle East.

Given the immense number of Model Ts, they and other inexpensive autos inevitably began to appear in places where people had never seen cars before. By



A 1960s-era car in London.

1904 Ford had set up a small subsidiary to sell cars in Canada. By 1910 Fords were being sold around the world, including in Mauritius, Kuala Lumpur, and Turkey. A Ford assembly plant opened in Manchester, England, in 1911 to serve the growing British and European markets. In addition, nearly five thousand U.S. cars, mostly Fords, were being exported every year. This amount only increased with the coming of war to Europe in 1914 and throughout the 1920s.

After World War I the Model T began to lose its overwhelming market advantages as competition from other manufacturers began to increase. Creation of the General Motors conglomerate led to a proliferation of competing car models, many of which had features that Fords lacked. In addition, during the 1930s Nazi Germany introduced the Volkswagen as a car for the masses. However, the worldwide economic depression of the 1930s slowed growth of the automobile. Fast growth, especially in Asia, would reemerge after World War II.

The Postwar Picture

Numerous shifts in the international automobile market have taken place since World War II. After the war the United States was clearly the world's dominant supplier, but by the 1960s the global automobile industry was shifting toward Asia. Korea and Japan have developed the

most globally significant automobile industries. In Japan companies such as Mitsubishi have been producing vehicles since the 1920s. In addition, Japanese automobile factories suffered relatively light damage during the war, and, as a result, the automobile industry was one of the first that the U.S. occupation allowed to resume production. The outbreak of the Korean War in 1950 provided Japan with an export market for vehicles, and by 1952 the Japanese Ministry for International Trade and Industry (MITI) was creating conditions favorable for exporting Japanese autos. Japanese manufacturers also teamed with European companies to produce Hillmans, Austins, and Renaults. In 1955 MITI again directed the industry with a new strategy for small, inexpensive automobiles. Japanese companies began to excel in the production of these cars, creating an international niche where Japanese cars could undercut European and U.S. cars. By the 1960s the U.S. counterculture had found a surprisingly consumerist way to avoid supporting the U.S. automobile industry and its ties to the defense industry—it bought Japanese cars.

The oil crisis of 1973 increased international interest in small, fuel-efficient Japanese cars. The explosion of the international market for Japanese cars was marked by the changing output of the Japanese industry—from less than .5 million cars in 1960 to 7 million in 1973. Japan

History is the most dangerous product which the chemistry of the mind has concocted. It produces dreams and drunkenness. It fills people with false memories, exaggerates their reactions, exacerbates old grievances,

had become the world's second-largest automobile producer, and its automobile industry, along with its consumer electronics industry, was the driving engine of Japan's postwar "economic miracle." Korea followed the Japanese model during the 1970s and by the late 1980s became the first new major exporter to the industrialized nations since Japan's emergence during the 1960s.

The Modern Era: Power and Pollution

The U.S. vehicle population since 1969 has grown six times faster than the human population and two times faster than the rate of new drivers. Despite comprising only 5 percent of the world's population, U.S. drivers own 34 percent of the world's cars. Registrations of new cars in the United States increase by 2 percent each year. By the year 2100 the current 600 million cars registered worldwide (one-third of them in the United States) could reach 4.5 billion. China, the world's most populous and rapidly industrializing country, is leading the ominous Third World rush to "modernize" through the use of pri-

ivate cars. Although almost 80 percent of its travel is now either by foot or bicycle, China could have 100 million cars by 2015.

Because of this global mania for private automobiles, together with the means to acquire them, experts project a huge increase in the world car population during the next one hundred years. Because cars account for one-third of smog-related emissions and one-quarter of global warming, such an increase would obviously have disastrous consequences for global health. In half the world's cities the biggest source of air pollution is exhaust emissions. The World Bank estimates that in Asia thousands of people die prematurely every year from filthy air. The problem is worst in China, which relies heavily on coal, but the problem is bad elsewhere. In Athens, Greece, the death rate increases 500 percent on bad air days. In Sao Paulo, Brazil, clogged streets and dirty air have forced officials to set up a rotation system for drivers to keep one-fifth of the city's cars off the streets at any given time. In Tel Aviv, Israel, cars are a huge problem: By 2010 smog is predicted to reach the levels of Mexico City (the



A decorated German family camper on a tour of Europe in the 1990s.

torments them in their repose, and encourages either a delirium of grandeur or a delusion of persecution. It makes whole nations bitter, arrogant, insufferable. • PAUL VALÉRY (1871–1945)

worst in the world, with ozone levels three times safe limits); already smog has caused outbreaks of asthma and bronchitis in Tel Aviv and in nearby Jerusalem. In Prague, Czech Republic, smog forces police to set up roadblocks to keep all but essential traffic out of the city center. Drivers in Singapore pay a premium for licenses that allow them unlimited access to highways.

However, even as we realize what our continuing reliance on the private automobile is costing us, we add 50 million of them to the global burden every year.

THE GROWING CHINESE MARKET

The U.S. auto industry sees golden opportunities in China. General Motors in 1997 joined with Shanghai Automotive Industry Corporation to build Buick Centuries and Regals in China. Wayne Booker of Ford's international operations staff says that the Chinese market is important to the long-term success of Ford. Chrysler recently unveiled a two-cylinder China Car made of plastics.

During 2002 China's auto industry sold 2.4 million vehicles, according to the People's Bank of China. The country's auto industry is growing at the fastest rate in the world, increasing by more than 30 percent between 1990 and 1998. The industry grew by 20 percent in 2001 alone, and the number of passenger cars in China is expected to double between 2002 and 2006. Other Asian countries that are rapidly adding cars to their roads are Indonesia, Vietnam, and India.

Whether they are in China or the United States, cars are pollution factories on wheels. The average gasoline-powered car in one year produces 4.5 metric tons of carbon dioxide, which causes global warming. Auto plants also are a source of emissions, particularly from their paint shops, although some manufacturers now use cleaner water-based paints.

Some observers hope that a new generation of internal combustion engines can eliminate the worst effects of tailpipe emissions. Honda in 1997 announced its Zero-Level Emission Vehicle (ZLEV), whose 2.3-liter four-cylinder engine, Honda claimed, produced emissions that were actually cleaner than the ambient air. However,

Roland Hwang, then transportation program director of the Union of Concerned Scientists, said that Honda's claims did not take into account all the ancillary emissions associated with gasoline-powered automobiles, such as those produced by fuel transportation and refineries. A ZLEV, Hwang said, could create seventy times more hydrocarbons and five times more nitrogen oxides than reported by Honda.

SPORT UTILITY VEHICLES

However, the rapid growth of the gas-guzzling sport utility vehicle (SUV) has obliterated advances in clean engine technology, especially in the United States. In 1985 SUVs accounted for only 2 percent of new vehicles sold in the United States; in 2003 they were the most popular form of vehicle, accounting for more than 25 percent of sales, and in 2004 SUVs accounted for 24.6 percent of sales. No other country has taken to SUVs so enthusiastically, but they are an increasingly familiar sight on roads around the world.

In the United States SUVs are considered to be light trucks and thus are allowed to pollute more than cars. According to Friends of the Earth, an environmental advocacy group, a Volkswagen New Beetle (a small car) will emit close to 49 metric tons of carbon dioxide during its lifetime, whereas a Lincoln Navigator (an SUV) will emit 90 metric tons. The National Academy of Sciences reports that light trucks (including SUVs, pickups, and minivans) could reach a fuel efficiency of 13 kilometers per liter (30 miles per gallon) with an expenditure of \$1,200 to \$1,300 per vehicle, but they are required to meet only the federal light-truck standard of approximately 9 kilometers per liter (20.7 miles per gallon).

In 2000 General Motors and Ford announced efforts to improve fuel economy for SUVs, but the vehicles still lag behind. The Dodge Durango, GMC Yukon, Cadillac Escalade, and other heavy SUVs average 5 kilometers per liter (12 miles per gallon) in city driving. The EPA estimates that a 1.2 kilometer-per-liter (3 mile-per-gallon) increase in average fuel economy would eliminate 140 metric tons of carbon dioxide emissions and save \$25 billion a year in fuel costs annually.

The man who goes alone can start today; but he who travels with another must wait till that other is ready. • HENRY DAVID THOREAU (1817–1862)

OTHER ENVIRONMENTAL PROBLEMS

Beyond the tailpipe one-third of the average U.S. city's land is devoted to serving the car, including roads, parking lots, and service stations. Jan Lundberg, anticar activist and founder of the Alliance for a Paving Moratorium, says asphalt covers 96,000 square kilometers of the United States, obliterating 16 million hectares of farmland. Ten percent of the arable (fit for growing crops) land and 2 percent of the nation's surface area are covered, he says.

Daily commutes are also increasing as cities sprawl farther into suburbs. In the United States an hour a day in the car has become the norm. The average U.S. family takes ten car trips a day, mostly to shop, recreate, or socialize. For every 16 kilometers a person travels, approximately 14 kilometers are traveled in a car. The U.S. interstate highway system is completed, but \$200 million is spent every day improving, repairing, and building roads in the United States. Parking enforcement and traffic management on those roads cost \$48 billion annually, and another \$20 billion goes to routine maintenance. However, the National Transportation Board predicts that delays caused by congestion will increase by 5.6 billion hours between 1995 and 2015, wasting 28 billion liters of fuel. The federal General Accounting Office estimates the loss of national productivity resulting from traffic congestion at \$100 billion a year. Seventy percent of all daily peak-hour travel on interstates now occurs in stop-and-go conditions.

Reinventing the Wheel

Fortunately for the human race, alternative fuel technology has continued to develop, and replacements for the internal combustion engine may at last be practical. Fuel cell technology, which was first demonstrated in principle in 1839, can be compared to car battery technology: Both fuel cells and traditional car batteries produce electricity. The difference is that batteries store both their fuel and their oxidizer internally, which means that periodically batteries must be recharged, whereas fuel cells, like a car engine, can run continuously because their fuel and oxidizer are not sealed up inside them.

Although several kinds of fuel cells exist, developers

are considering only one type, the proton-exchange membrane (PEM) cell, for cars. The modern work on fuel cells is all fairly recent, but the technical problems of the cells themselves have been mostly worked out, and the main obstacles concern building a worldwide infrastructure for hydrogen production and distribution. Fuel-cell buses preceded passenger cars onto the road, appearing in the late 1990s. Fuel-cell cars keep appearing in very small numbers (not really prototypes, but certainly not production scale vehicles, either). Most automobile developers are putting some varying level of R&D into fuel-cell development. In addition, government labs in most industrialized nations are also researching the problems of manufacturing and distributing hydrogen production technologies. However, even with the presence of fuel cars on our roads, analysts don't expect hydrogen vehicles to have a serious impact on internal combustion cars until 2015 or 2020. When hydrogen vehicles arrive, they promise a new era of sustainable, zero-emission cars and trucks.

Battery-powered EVs meanwhile have largely fallen by the wayside because of their limited range. The EV1, introduced by General Motors with much fanfare in 1996, can travel only 112 kilometers in city driving before needing a recharge when equipped with lead-acid batteries. The battery-powered car therefore has severe handicaps to overcome in the race to become the world's mainstream automobile. In 2004 only a tiny percentage in comparison to traditional gas-powered engines were being built around the world, and Ford announced that it was discontinuing its Th!nk division, which produced battery vehicles such as the Norwegian-sourced City car, in order to turn those resources over to the development of fuel-cell vehicles.

The Road Ahead

Although people think of the automobile as a symbol of the developed world, its impact in environmental, economic, and social terms has not been limited to wealthy nations. During the twenty-first century virtually every nation produces automobiles and automobile parts, and commodities peripheral to automobiles, from rubber to oil, play major roles in the global political economy. The

automobile industry has become global in that automobile manufacturers view the world as a single market instead of as a series of nationally defined, discrete markets. Manufacturers also view production as borderless, with both automobiles and their components moving seamlessly between Europe, the United States, Asia, and Latin America. However, automobiles also present an environmental challenge that is borderless.

Jim Motavalli and Ann Johnson

See also Oil; Transportation—Overview

Further Reading

- Angelucci, E., & Bellucci, A. (1974). *The automobile from steam to gasoline*. New York: McGraw-Hill.
- Bradsher, K. (2002). *High and mighty: SUVs—the world's most dangerous vehicles and how they got that way*. New York: Public Affairs.
- Brinkley, D. (2003). *Wheels for the world*. New York: Viking.
- Cardwell, D. (1995). *The Norton history of technology*. New York: W. W. Norton.
- Crabb, A. R. (1969). *Birth of a giant: The men and incidents that gave America the motorcar*. Philadelphia: Chilton.
- DeCicco, J. K., Martin, J., & Martin, T. (2000). *ACEEE's green book: The environmental guide to cars and trucks*. Washington, DC: American Council for an Energy-Efficient Economy.
- Flink, J. J. (1970). *America adopts the automobile, 1895–1910*. Cambridge, MA: MIT Press.
- Flink, J. J. (1990). *Automobile age*. Cambridge, MA: MIT Press.
- Georgana, N. (1992). *The American automobile: A centenary*. New York: Smithmark Publishers.
- Jack, D. (2000). *Taken for a ride: Detroit's big three and the politics of pollution*. New York: Four Walls Eight Windows.
- Japan Automobile Manufacturers Association. (1995). *Japan's auto industry*. Tokyo: Author.
- Kay, J. H. (1997). *Asphalt nation*. New York: Crown Publishers.
- Levine, G. (1974). *The car solution: The steam engine comes of age*. New York: Horizon Press.
- Nadis, S., & MacKenzie, J. J. (1993). *Car trouble: A world resources guide*. Boston: Beacon Press.
- Pettifer, J., & Turner, N. (1984). *Automania*. Boston: Little, Brown.
- Purdy, K. (1949). *Kings of the road*. Boston: Atlantic Monthly Press.
- Schiffer, B. M. (1994). *Taking charge: The electric automobile in America*. Washington, DC: Smithsonian Institution Press.
- Sears, S. W. (1977). *The automobile in America*. New York: American Heritage Publishing.
- Shnayerson, M. (1996). *The car that could: The inside story of GM's revolutionary electric vehicle*. New York: Random House.
- Sperling, D. (1995). *Future drive: Electric vehicles and sustainable transportation*. Washington, DC: Island Press.
- Stein, R. (1961). *The treasury of the automobile*. New York: Golden Press.
- Whitener, B. (1981). *The electric car book*. Louisville, KY: Love Street Books.
- Zuckerman, W. (1991). *End of the road: From world car crisis to sustainable transportation*. White River Junction, VT: Chelsea Green.

Aztec Empire

The Aztec empire dominated central Mexico from 1430 until its conquest by Spanish conquistadors in 1521. At its height it ranged from the Gulf coast to the Pacific, and from nearly 160 kilometers north of Mexico City to the present-day Guatemalan border. It encompassed high plateaus, broad and narrow valleys, daunting mountain ranges, and verdant tropical forests.

Antecedents

As the last great political force in Mesoamerica, the Aztecs drew on the experience and accomplishments of a succession of earlier civilizations. In central Mexico, the monumental city of Teotihuacan flourished from 150 CE until approximately 750. This city established strong regional control in addition to conquering more distant areas, and it engaged in trade with and exercised political influence over polities as distant as those of the Maya in the lowlands of present-day Guatemala. Later, from 950 until around 1150, the city of Tula (in present-day Hidalgo), a major regional center of the Toltec people, gained prominence; it was closely tied to the city of Chichén Itzá in northern Yucatán. However, Tula does not appear to have developed an empire in the manner of the earlier Teotihuacanos or the later Aztecs.

The Aztecs drew on much of the Teotihuacan experience in developing their own empire: Their capital city of Tenochtitlán was laid out on a grid plan (as was Teotihuacan), they engaged in human sacrifice at a state level, they conquered far-flung territories in creating an empire, and they gave prominence in their godly pantheon to the deities Quetzalcoatl and Tlaloc, both of whom appear in somewhat different form at Teotihuacan. From Tula and the Toltecs the Aztecs appear to have gained their understanding of power politics, and they based their legitimacy to rule on a Toltec foundation. The Aztecs also venerated the achievements of the Toltecs at a nearly mythical level, attributing to the Toltecs all of the fine arts and cultural achievements (such as the calendar and writing) that the Aztecs themselves enjoyed. Aztec appreciation of their predecessors is clear not only from these emulations, but



also from their inclusion of images of Teotihuacan, and the presence of other “antiquities” as offerings in buried caches in the Templo Mayor district of Tenochtitlán.

The Basis of Empire

The Basin of Mexico served as the seat of power for the Aztec empire. This lake-dominated valley had been a popular settlement choice for a long succession of sedentary peoples, and indeed Teotihuacan is located in its northern region. Beginning around 1200, several hunting and gathering groups moved south into more fertile regions from the dry northern deserts. Leaving their original homeland of Aztlan (as yet unidentified), seven of these groups stopped at Chicomoztoc, or Seven Caves, and undetermined location in present-day northern Mexico. While historical accounts offer varying ethnic identifications, these groups moved south and settled in key locations around the Basin of Mexico and in valleys to the east, south, and west. These included the Acolhua, who established themselves east of Lake Texcoco; the Tepaneca, who settled to the west of the lake; the Xochimilca and Chalca, who took up residence in the south of the basin, and the Matlatzinca, Tlahuica, and Huexotzinca, who settled in neighboring valleys. In each case, the people and their cultures blended with the resident sedentary populations.

The last to arrive were the Mexica who, after a dramatic arrival and turbulent relationships with resident polities, established themselves on a small island in Lake Texcoco in 1325. They named their city Tenochtitlán; it was to become an enormous metropolis and center of the Aztec empire.

From 1325 until 1428 the Mexica pursued long-standing and widely accepted strategies on their road to ultimate imperial dominance. Renowned warriors, they served as mercenaries to the most powerful polity in the Basin of Mexico, Azcapotzalco (flourished c. 1300–1428). Their successes on the battlefield earned them lands, tributaries, and wealth, which they used to enhance their resource-poor island settlement. They concentrated on building and expanding their urban center beyond its small island setting and into the lake itself by claiming lands from the shallow lake bed. Ultimately (by 1519) the city would house 200,000 to 250,000 people. During this early period they also negotiated strategic elite marriages, particularly with the Colhuacan dynasty in the southern part of the basin. The Colhua claimed descent from the Toltecs, and establishing genealogical ties to that heritage gave the Mexica an enhanced power base and legitimacy to rule. With this dynastic connection forged, subsequent Mexica rulers successfully sought favorable marriage ties with other dynasties in the Basin of Mexico. In short, their first century in the basin provided the Mexica with the military, political, social, and economic foundation for their second century of imperial dominance.

The Growth of Empire

In 1428 the elderly ruler of the powerful city-state of Azcapotzalco died. The Mexica and their neighbors, the Acolhua of Texcoco, took advantage of the ensuing internal power struggle, conquering that ancient seat of power. In the course of that war, the Mexica and Acolhua also joined with the Tepaneca of Tlacopán on the western shore of Lake Texcoco. These three major city-states joined to form a tripartite alliance, commonly known today as the Aztec empire or the Triple Alliance empire (the name Aztec means “People of Aztlan,” although this term did not enter common usage (in scholarship, but

not as a term the people used in reference to themselves) until well after the Spanish conquest. It is often used today by scholars to refer generally to Nahuatl-speaking peoples in and around the Basin of Mexico in late post-classic times). The people often referred to themselves as Mexica, Acolhua, Xochimilca, Chalca, etc., based on their city-state and ethnic affiliations. The Mexica under Itzcoatl (reigned 1426–1440) and the Acolhua under Nezahualcoyotl (reigned 1418–1472) took the initiative in the alliance's expansionistic enterprises.

After consolidating their new political position in 1430, the Triple Alliance forces began an aggressive program of military conquest within the Basin of Mexico. The city-states they conquered were obligated to provide tribute to their conquerors on a regular basis, but they were also given opportunities to participate in and reap rewards from Triple Alliance conquests in more distant realms. The Triple Alliance rulers also forged alliances with these tributary city-states, solidifying their dominance through politically inspired marriages. The practice of polygyny among nobles favored this strategy, allowing a ruler to marry several women simultaneously and therefore establish numerous alliances in this fashion. Nonetheless, the conquests and alliances were not necessarily easy: For instance, Chalco, in the southeast corner of the Basin of Mexico, waged on-and-off war with the Triple Alliance powers for some three additional decades, finally succumbing to Aztec military might in either 1453 or 1465.

Even before the conquest of Chalco was concluded, the Mexica and their allies were already making military advances on city-states beyond the Basin of Mexico. The Mexica king Motecuhzoma Ilhuicamina (Motecuhzoma the Elder; commonly known in English as Montezuma I; reigned 1440–1468) spent his first decade of rule further consolidating conquests in the Basin of Mexico. Then he and subsequent Mexica rulers Axayacatl (reigned 1468–1481), Tizoc (reigned 1481–1486), Ahuitzotl (reigned 1486–1502), and Motecuhzoma Xocoyotzin (Motecuhzoma the Younger, or Montezuma II; reigned 1502–1520), along with the tenacious Nezahualcoyotl and his son Nezahualpilli (reigned 1472–1515) of Texcoco (who together reigned from 1418 until 1515) led the Triple Alliance to military conquests beyond the basin to ulti-

The Lactation Diet

Although the Aztec Empire was destroyed by the Spanish in the sixteenth century, its influence continues in Mexican and Mexican-American communities in the twenty-first century. The following account describes an Aztec medicinal drink used by lactating mothers in some Mexican and Mexican-American communities.

In addition to tea the mother was given atole to hasten her recovery and to enhance her milk supply. Atole is an ancient Aztec beverage prepared of ground corn, water, and spices such as cinnamon. It is also sweetened, and once again, the higher status the family the sweeter the atole. Atole may be made of ground corn that is dry, or corn in a moist mass such as is used in tortillas; it may be made of toasted ground corn, or even of ground wheat. The corn or wheat is stirred into warm water and then warmed again with sugar and spices. The cup of atole often constituted the evening meal for the lactating mother along with a tortilla.

Source: Acosta Johnson, C. (1980). Breast-feeding and social class mobility: the case of Mexican migrant mothers in Houston, Texas. In M. B. Melville (Ed.), *Twice a minority: Mexican American women*. St. Louis, MI: Mosby.

mately bring much of central and southern Mexico into their imperial net. In these conquests, Tlacopán remained the lesser partner.

This progression of imperial expansion was not without its setbacks. Provinces sometimes rebelled against their overlords, and reconquest campaigns had to be mounted. The Mexica ruler Motecuhzoma Xocoyotzin spent a great deal of military energy simply reasserting imperial power over previously conquered city-states. Indeed, the empire may have come close to its maximum territorial extent by the time the Spaniards arrived in 1519. To the north lay deserts and areas relatively unattractive for conquest, to the east lay the Gulf of Mexico, and to the west sat the powerful Tarascans. To the south lay the rich regions of the Mayan city-states. Their considerable distance from the Basin of Mexico may have been a deterrent to Aztec conquest, since all travel and transport was by foot or canoe. Access to the precious Mayan resources was effectively obtained through the energetic

In the end, we will remember not the words of our enemies, but the silence of our friends. • MARTIN LUTHER KING JR. (1929–1968)

commercial activities of professional merchants, some of them engaged by the Aztec state.

The Aztecs were not invincible. A major war between the Aztecs and Tarascans in 1478 or 1479 resulted in a devastating defeat for the Aztec forces, and the Triple Alliance avoided engaging the Tarascans in a major war again. There were also pockets of unconquered city-states within the imperial bounds. Most notable among these were the Tlaxcallans to the east of the Basin of Mexico, who, although surrounded by the Triple Alliance empire, remained independent of the Aztec yoke. In 1519 they became decisive allies to the Spanish conquistadors in their conquest of Tenochtitlán.

Further serious problems beset the empire during its short ninety-one-year history. For instance, from 1450 to 1454 a calamitous famine wracked central Mexico, to the extent that thousands of people perished and some that survived exchanged their freedom for maize with the Totonacs of the Gulf coastal region. And in 1503 a devastating flood consumed much of Tenochtitlán, necessitating an energetic rebuilding program.

Structure and Strategies of the Aztec Empire

The primary goal of imperial rule was the acquisition of tribute paid on a regular basis to the Triple Alliance overlords. Upon conquest, a subdued city-state would agree to scheduled payments of locally available goods and products such as maize, chilies, honey, raw cotton, clothing, wood products, incense, warriors' costumes and shields, greenstones, gold, feathers and jaguar skins. As long as these demands were met and the city-state did not rebel, the imperial powers took little interest in the affairs of their subjects. Politically, local rulers were usually allowed to remain in their traditional positions. The most prominent and insistent Aztec presence in conquered areas was in the form of imperial tribute collectors. Only occasionally, in recalcitrant areas, were Aztec officials such as governors installed or military garrisons stationed.

This loose structure disguised a well-considered system of political organization. In the core area of the empire (the Basin of Mexico), the Aztec empire had the most

time to integrate conquered city-states into its political and economic net. They pursued dynastic marriages with local rulers, then installed the offspring of these royal marriages in the conquered city-state: The new ruler therefore combined local legitimacy with imperial loyalties. In some cases new administrative offices were created, and in a few instances local rulers were actually replaced by those selected by the imperial powers. More subtly, city-states of the basin were often required (or invited) to participate in military ventures as the Triple Alliance advanced to conquer far-flung polities. If successful, warriors of these subjugated city-states could gain gifts and titles as rewards, thus heightening their interest in remaining part of the empire. They were not only attached to the empire, they had become participants in it.

More distant conquered areas saw fewer advantages to their conquest. It was usual that many of the conquered warriors were taken to the Aztec capital cities for sacrifice immediately following conquest. The demands of tribute were unrelenting, and if an Aztec army on the march passed through, the local population could be drained of its subsistence resources to supply the military.

The Triple Alliance employed well-considered strategies in establishing and maintaining its imperial control in outlying areas. An economic strategy focused on the city-states (administratively grouped into provinces) that paid regularly scheduled tribute to the Aztecs. Beyond the Basin of Mexico, this totaled thirty-two provinces that provided much economic support for the rulers and people of the Triple Alliance capitals: Maize and other foodstuffs were stored against possible famine; warfare paraphernalia was held for military use; specific goods were stored and distributed as gifts, commissions, or for foreign trading enterprises; the enormous imperial bureaucracy and expensive priestly activities were supported; raw materials were fashioned by urban artisans into luxury wares for the nobility; and in general the extravagant lifestyle of imperial royalty and palatial life was enhanced. The imperial powers maintained this continual flow of tribute goods through threats of reprisals, usually entailing reconquest and a doubling of tribute demands on a rebellious province. As the empire continued expanding, an addi-



tional strategy became useful. This was a frontier strategy, and entailed the establishment of client states along hostile borderlands, astride critical transportation routes, or near critical but contested resources. In place of an outright military conquest, the Aztecs negotiated mutually beneficial agreements with these city-states, cemented with gifts. Client states served the empire by assuring borderland control, open transportation routes for merchants and troops, and access to critical resources. In this strategy, the Aztecs found an inexpensive way of managing their distant affairs. Nonetheless, they did establish fortresses and station garrisons at specific military hot spots, whether along volatile borders or within defiant provinces.

Fall of the Aztec Empire

In early 1519 a small force of Spanish conquistadors landed on the Mexican mainland. They had learned of the large empire led by Motecuhzoma and of his vast wealth; tales of treasures of gold were of special interest to the Spaniards. Under the leadership of Hernán Cortés, they traveled inland with the intent of conquering this rich land. A number of factors contributed to the ultimate Spanish victory. Spanish weaponry had some small advantage, with muskets, cannons, and especially steel swords. Horses provided mobility and height in battle, and ferocious dogs sparked considerable fear in the hearts of the native warriors (the small native domesticated dogs, commonly used as food, were of a different genre entirely from the large European canines). In the heat of battle, a major goal of native (but not Spanish) combat was the capture of the enemy for sacrifice, resulting in valorous risks and high indigenous casualties. Most important was the tenuous hold the Aztecs had on their conquered and client city-states, and the presence of significant unconquered polities. Cortés took early advantage of this loose organization to convince many of these city-states, and especially the powerful Tlaxcallans, to join him in his goals of conquest; in the end, the small force of Spaniards was massively augmented by native warriors. The seeds of destruction were built into the Aztec imperial structure. Cortés's siege tactics employed late in the conquest took a final toll on a starving

Tenochtitlán devoid of allies and wracked with smallpox, a disease that arrived with the Europeans and to which the local population had no immunity. Motecuhzoma had perished and his successor Cuitlahuac fell to the disease during the siege. On 13 August 1521 the last Aztec ruler, Cuauhtemoc, was captured by the Spanish conquistadors, signaling the end of Aztec imperial dominance in Mesoamerica.

Frances Berdan

See also Mesoamerica; Motecuhzoma II; Trading Patterns, Mesoamerican; Warfare—Pre-Columbian Mesoamerica and North America

Further Reading

- Berdan, F. (1982). *The Aztecs of central Mexico: An imperial society*. Belmont CA: Wadsworth.
- Berdan, F., & Anawalt, P. (1992). *The Codex Mendoza*. Berkeley and Los Angeles: University of California Press.
- Berdan, F., Blanton, R. E., Boone, E. H., Hodge, M. G., Smith, M. E., & Umberger, E. (1996). *Aztec imperial strategies*. Washington, DC: Dumbarton Oaks Research Library and Collection.
- Boone, E. (Ed.). (1987). *The Aztec Templo Mayor*. Washington, DC: Dumbarton Oaks.
- Carrasco, P. (1999). *The Tenochca empire of ancient Mexico: The triple alliance of Tenochtitlan, Tetzaco, and Tlacopan*. Norman: University of Oklahoma Press.
- De Sahagún, B. (1950–1982). *Florentine Codex: General history of the things of New Spain*. (A. J. O. Anderson & C. E. Dibble, Eds. & Trans.). Salt Lake City: University of Utah Press.
- Díaz del Castillo, B. (1963). *The conquest of New Spain*. (J. M. Cohen, Trans.). New York: Penguin.
- Durán, D. (1994). *The history of the Indies of New Spain* (D. Heyden, Trans.). Norman: University of Oklahoma Press.
- Gillespie, S. D. (1989). *The Aztec kings: The constitution of rulership in Mexica history*. Tucson: University of Arizona Press.
- Hassig, R. (1988). *Aztec warfare: Imperial expansion and political control*. Norman: University of Oklahoma Press.
- Hodge, M. G., & Smith, M. E. (Eds.). (1994). *Economies and politics in the Aztec realm*. Albany, NY: Institute for Mesoamerican Studies, SUNY Albany.
- López Luján, L. (1994). *The offerings of the Templo Mayor of Tenochtitlan*. Niwot: University Press of Colorado.
- Matos Moctezuma, E., & Solís Olguín, F. (Eds.). (2002). *The Aztecs*. London: Royal Academy of Arts.
- Quiñones Keber, E. (1995). *Codex Telleriano-Remensis: Ritual, divination, and history in a pictorial Aztec manuscript*. Austin: University of Texas Press.
- Smith, M. E. (2003). *The Aztecs* (2nd ed.). Oxford, UK: Blackwell Publishing.
- Thomas, H. (1993). *Conquest: Montezuma, Cortés, and the fall of Old Mexico*. New York: Simon & Schuster.

Babi and Baha'i
Babylon
Balance of Power
Bands, Tribes, Chiefdoms,
and States
Barter
Benin
Berlin Conference
Biological Exchanges
Bolívar, Simón
British East India Company
British Empire
Buddhism
Bullroarers
Byzantine Empire

Babi and Baha'i

The Baha'i religion was founded and initially propagated toward the middle of the nineteenth century in the (then) Ottoman regions of Iraq, Turkey, and Palestine by a Persian-born messianic claimant named Mirza Hoseyn Ali Nuri (1817–1892), who adopted the title Baha'u'llah (Baha' Allah), meaning the “Splendor of God.” His followers today number 5–6 million and are known as Baha'is (literally “radiant ones”). They are globally scattered throughout the world such that the modern Baha'i religion can no longer be viewed as a purely Middle Eastern movement, an Islamic “sect,” or a merely eclectic religious phenomenon.

Baha'u'llah was born a Shiite Muslim in a troubled Persian Islamic society. He yet called all humankind to a revolutionary and modernist post-Islamic religion, initially that of his predecessor the Bab (literally the “Gate”) and subsequently to the Baha'i religion, which he himself founded. His message speedily transcended and superseded Islamic legal and other religious norms as the new Baha'i religion, not only for the contemporary world but also for times extending a millennium or more into the future. The developed Baha'i religion is centered upon actualizing a spiritual unity in diversity of all humankind in a future world characterized by millennial justice and peace. Religion and science, Baha'u'llah and his successors indicated, should both harmoniously contribute to an advancing civilization in which racism, excessive nationalism, and materialistic capitalism are transcended.



The Religion of the Bab

Baha'u'llah became a follower of another young Persian messianic claimant, Mirza 'Ali Mohammad (1819 or 1820–1850), the Bab, at the outset of his religious mission in May 1844. He considered the Bab to be his divinely inspired forerunner. The Bab himself gradually established his own post-Islamic religious system and revealed new books in Arabic and Persian collectively known as the *Bayan* (Exposition). He was imprisoned for much of his six-year religious ministry, which terminated with his execution for heresy in 1850. Several thousand of his followers were also martyred for apostasy and heresy. Though best known today as the Bab (gate to the messiah), this Persian Sayyid (descendant of Muhammad) actually claimed to be the awaited Islamic eschatological savior, the *Qa'im* (Ariser) or *Mahdi* (Rightly Guided One). He also subsequently claimed to be a divine “Manifestation of God” and underlined the eternally progressive continuity of religion, thereby transcending the Muslim concept of the finality of prophethood in Muhammad (Quran 33:40).

With his many revelations, the Bab claimed to disclose the deeper senses of the Quran and of pre-Islamic scripture, and to prepare the way for another messianic individual greater than himself. In superseding Islam, the Bab also spoke of endless future messiahs. These superhuman, divine figures were actually preexistent and theophanic manifestations of God, the next of whom might appear imminently or perhaps, for example, after 9, 19, 1,511, or 2,001 years.

When and Where World Religions Began

4000–2500 BCE	Hinduism	South Asia
1300–1200 BCE	Judaism	West Asia
500–400 BCE	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400–221 BCE	Daoism	China
1ST CENTURY CE	Christianity	West Asia, Europe
3RD CENTURY CE	Manichaeism	West Asia
6TH CENTURY CE	Shinto	Japan
7TH CENTURY CE	Islam	West Asia
11TH CENTURY	Orthodoxy	West Asia
15TH–16TH CENTURY	Sikhism	South Asia
16TH CENTURY	Protestantism	Europe
19TH CENTURY	Latter-day Saints	North America
	Babi and Baha'i	West Asia
19TH–20TH CENTURY	Pentecostalism	North America

**The tomb of the Bab on
Mount Carmel, Israel.**



**Baha'u'llah and Religion
Renewed**

Baha'u'llah followed and propagated the religion of the Bab from its inception in 1844 until the latter years of his exile from Iran to Iraq (1852–1863), when he began to gradually declare his own global mission. On announcing his mission in the outskirts of Baghdad in 1863, he outlawed the propagation of religion by the sword, indicated that his religion would continue for at least a millennium, and voiced doctrines indicative of the equality and oneness of all humanity.

Like the Bab, Baha'u'llah composed thousands of scriptural “tablets” in Arabic and Persian over a forty-year period (1852–1892). These perhaps 20,000 revelations vary in length from a few lines to weighty books and treatises such as his *Kitab-i iqan* (Book of Certitude, 1852), *Kitab-i badi'* (Innovative Book, 1867), and his major though slim book of laws, *al-Kitab al-Aqdas* (The Most Holy Book, 1873). Like his forerunner, he placed great emphasis upon the nonliteral interpretation of the Bible and the Quran and often gave figurative interpretations to messianic signs and latter-day prophecies. Apocalyptic upheavals and catastrophes, he explained, had been realized or would come to be fulfilled either literally or spiritually. Hopes of a new age and of the millennial future of humanity would, he predicted, definitely come to realization in a future Baha'i-inspired new world order.

Despite being exiled and imprisoned for religious heresy for several decades of his life by Persian and Ottoman leaders, Baha'u'llah courageously addressed weighty and theologically authoritative epistles to various

kings, rulers, and ecclesiastics of his day. Among those he called to God and to righteous rule were the British queen Victoria (1819–1901), the French emperor Louis-Napoleon (Napoleon III; 1808–1873), the Russian czar Nicholas II (1868–1918), and the Italian pope, Giovanni Maria Mastai-Ferretti, Pope Pius IX (1792–1878).

It was clear from his *Kitab-i 'Ahd* (Book of My Covenant) that on Baha'u'llah's passing in Palestine in 1892, his saintly and learned eldest son 'Abd ol-Baha' (1844–1921) would succeed him. He wrote several books and many thousands of letters expounding his father's message and visited several western countries between 1911 and the outbreak of World War I in 1914. “The Master,” as 'Abd ol-Baha' was respectfully known, was in turn succeeded in 1921 by an Oxford-educated great-grandson of Baha'u'llah named Shoghi Effendi Rabbani (1896–1957), the last single head or Guardian of the Baha'i religion. In 1963, the globally elected Universal House of Justice came to direct and govern the Baha'i world from its center in Haifa, Israel.

Baha'u'llah's oft-repeated statement that the earth is but one country and all humankind its citizens continues to underpin many activities of the Baha'i world today. Its promotion of concrete and spiritual dimensions of the oneness of humanity, the equality of the sexes, international justice, and world peace makes the Baha'i religion a channel for the realization of a twenty-first-century religiosity that transcends contemporary secularism and exclusivism. Its continuing championing of a globally selected or newly-devised universal auxiliary language and close relationship as a non-governmental organiza-

If you reject the food, ignore the customs, fear the religion and avoid the people, you might better stay at home. • JAMES A. MICHENER (1901–1997)

tion with the United Nations since the inception of the latter in 1945 in working towards a peaceful global society stand among the multifarious contributions which the Baha'i international community has made to world history. In recent years, the Baha'i international authority known as the Universal House of Justice has issued a statement entitled "The Promise of World Peace" (1985) addressed to the peoples of the world and another called "To the World's Religious Leaders" (2002) containing aposite advice for the evolution towards a united humanity.

Stephen N. Lambden

Further Reading

- 'Abdu'l-Baha. (1969). *Paris talks: Addresses given by 'Abdu'l-Baha in Paris in 1911–1912*. London: Baha'i Publishing Trust.
- The Bab. (1978). *Selections from the writings of the Bab*. Haifa, Israel: Baha'i World Centre.
- Baha'u'llah. (1978). *Tablets of Baha'u'llah*. Haifa, Israel: Baha'i World Centre.
- Baha'u'llah. (1983). *The Kitab-i-iqan* (The book of certitude). Wilmette, IL: Baha'i Publishing Trust.
- Baha'u'llah. (1992). *Kitab-i-aqdas* (The most holy book). Haifa, Israel: Baha'i World Centre.
- Momen, M. (1997). *A short introduction to the Baha'i faith*. Oxford, UK: Oneworld.
- Shoghi Effendi. (1960). *The dispensation of Baha'u'llah*. Wilmette, IL: Baha'i Publishing Trust.
- Shoghi Effendi. (1991). *The world order of Baha'u'llah*. Wilmette, IL: Baha'i Publishing Trust.
- Smith, P. (1987). *The Babi and Baha'i religions: From messianic Shi'ism to a world religion*. Cambridge, UK, and New York: Cambridge University Press.
- The Universal House of Justice. (1984). *The constitution of the Universal House of Justice*. Haifa, Israel: Baha'i World Centre.
- The Universal House of Justice. (1985). *The promise of world peace*. Haifa, Israel: Baha'i World Centre.

Babylon

At its height, Babylon was one of the largest, most important cities of the ancient world. It was located in central Mesopotamia, near the point where the Tigris and Euphrates flow closest to one another. This same region has been home to many capital cities over the centuries: Kish, Agade, Seleucia, and Baghdad among them.

The city's ancient name, Babil, may well be in an unknown language that predates Sumerian and Akkadian in Mesopotamia. It came to be understood in Akkadian as *bab-ili*, meaning "gate of the god," also written in Sumerian as *ka-dingir-ra*, which has the same meaning. *Babylon* is the Greek version of the name. Today we refer to the southern half of ancient Mesopotamia—the region extending from around Babylon south to the Persian Gulf—as Babylonia, but in ancient times this land was called Sumer and Akkad.

The city of Babylon was well known to Greek and Roman historians. The Greek historian Herodotus, who may have visited the city in the fifth century BCE (or based his account on the reports of eyewitnesses), wrote that "it surpasses in splendor any city of the known world" (Herodotus 1972, 185). Classical authors also credited Babylon with one of the ancient wonders of the world: the Hanging Gardens of Babylon.

Babylon is mentioned frequently in the Bible. The Tower of Babel was certainly thought to have been located there; Babylon was the place to which Nebuchadnezzar II (reigned 605–562 BCE) exiled the Jews after the conquest of Judah; and the city was said to be home to Daniel. Therefore, unlike most other cities of the region, Babylon was not forgotten after its demise. Long after the buildings had disintegrated, the northernmost mound of the site even retained the name Tell Babil. What was forgotten, however, was the long history of the city before the period of Nebuchadnezzar.

Unfortunately, the underground water table at Babylon rose over the centuries, so even archaeologists have had difficulty fathoming the earlier history of the city. The occupation levels from the third and second millennia BCE are largely waterlogged. It is possible that, like the Assyrian city of Nineveh, the site was occupied long before written history, but there is no way to know. What we do know about Babylon before the first millennium BCE comes largely from textual records from other ancient cities.

The earliest known mention of the city of Babylon comes from the time of Sharkalisharri (reigned c. 2217–c. 2193 BCE), a king of Akkad and descendant of the

empire-builder Sargon (reigned c. 2334–2279 BCE). The inscription mentions two temples in the city, but little else is known from this early time.

First Dynasty of Babylon

At the beginning of the nineteenth century BCE, the history of Babylon comes into sharper focus. Around 2000 BCE the native Sumerian and Akkadian peoples of Mesopotamia had been subject to an invasion of Amorites, “westerners” who had settled in the river valley and largely adopted local customs. Amorite, like Akkadian, was a Semitic language, but its speakers did not write it down. They continued to use Akkadian and Sumerian in written documents.

Amorite kings took control of several Mesopotamian cities, Babylon among them. Over the next century, the Amorite dynasty of Babylon, founded by Sumu-Abum (reigned 1894–1880 BCE), consolidated its control over the surrounding lands. By the early eighteenth century BCE, a dozen kingdoms, including Babylon, dominated Mesopotamia and Syria, some bound together by alliances, others often at war.

Hammurabi (reigned 1792–1750 BCE) is considered to be the greatest of the kings of the first dynasty of Babylon (also called the Old Babylonian period). From the beginning of his reign he emphasized that he was a king who was concerned with justice. It was traditional at that time to refer to years by names rather than numbers, and Hammurabi’s second year name shows his concern for justice: “The year that Hammurabi established equity and freedom in his land” (Horsnell 1999, 2:106). But it was not until very late in his reign that Hammurabi decreed the set of laws for which he has become best known. By that time he had brought much of Mesopotamia under his rule, from Mari in Syria (just north of modern Iraqi border) to the Persian Gulf.

Although Hammurabi was not the first lawgiver (written laws had existed in Mesopotamia for more than two hundred years when he came to the throne), his laws made a strong impression on subsequent generations of Mesopotamian scribes, who copied and studied them for

centuries. His laws also had an influence on surrounding peoples such as the Hittites and Canaanites, and eventually on the Israelites and therefore on Biblical law.

Hammurabi venerated many gods, rebuilding their temples and presenting them with thrones and gifts, but he credited his successes mostly to the city god of Babylon, Marduk. The god’s statue was housed in a great temple in the center of the city. Marduk’s cult was an essential part of Mesopotamian religion from this time on.

Hittites and Kassites

Around 1595 BCE, the Hittites (a people from present-day Turkey and northern Syria) seem to have sacked Babylon and taken many Babylonians captive. They also captured the statues of Marduk and his wife Sarpanitum and took them back to their own land of Hatti, where the statues stayed for decades. Unfortunately, this event is poorly understood. It is almost unknown in Babylonian records and mentioned only briefly in Hittite records. No archaeological evidence exists because of the problems with excavating early levels at Babylon. But it is clear that the Hittites did not stay or attempt to rule Babylon.

The century after the conquest of Babylon remains something of a mystery, due to an almost complete lack of textual sources and little archaeological evidence, but by 1500 BCE a new foreign dynasty had taken control of Babylon: the Kassites. Their origin is unclear, their language known only from the evidence of their personal names. Like the Amorites, they adopted Babylonian ways, and they proved to be adept rulers. Mesopotamia was united and relatively peaceful during the centuries of Kassite rule. The Kassite kings of Babylon communicated regularly with the Hittite kings in Anatolia, the Syrian kings in Mittani, and the New Kingdom pharaohs of Egypt. Their correspondence, found in Egypt and Anatolia, shows that the Babylonian kings sent the Egyptian kings gifts of horses and lapis lazuli, in exchange for which they always wanted gold. They also wrote extensively about the marriage alliances that were set up between them. Several Babylonian princesses became queens of Egypt.

Code of Hammurabi

Hammurabi ruled Babylon from 1792 to 1750 BCE. His code of laws have great historic value as the earliest extensive laws that have come to light from the ancient Near East. The brief excerpts below place a high value on one's oath as a defense. Interestingly, Law 21, known as the Babylon Rule, makes government officials responsible for restitution to a resident who is robbed—on the assumption that the officials should have done a better job in enforcing law and order.

20 If the slave escapes from the hand of him who has caught him, that man shall take an oath by the life of a god for (the satisfaction of) the owner of the slave and he then goes free.

23 If the robber is not caught, the man who has been robbed shall formally declare whatever he has lost before a god, and the city and the mayor in whose territory or district the robbery has been committed shall replace whatever he has lost for him.

103 If an enemy causes him (a merchant's agent) to jettison anything that he is carrying whilst he is going

on the journey (for the merchant), the agent may take an oath by the life of a god and he then goes free.

120 If a man has stored his corn for storage in a bin in a man's house and a loss occurs in the granary, whether the owner of the house has opened the bin and taken the corn or whether he wholly contests (the storage of) the grain which has been stored in his house, the owner of the corn shall formally declare his corn before a god and the owner of the house must double the corn which has disappeared and give (it) to the owner of the corn.

131 If the husband of a married lady has accused her but she is not caught lying with another man, she shall take an oath by the life of a god and return to her house.

266 If the finger of a god touches or a lion kills (a beast) in the fold, the herdsman may purse (himself) before a god and the mischief in the fold shall fall on the owner of the fold.

Source: McNeill, W. H., & Sedlar, J. W. (1968). *The Ancient Near East* (pp. 152–153). New York: Oxford University Press.

By the thirteenth century BCE, a new power began to assert itself to the north of Babylon: Assyria. From this time onwards, Babylonia and Assyria became the chief powers and rivals in Mesopotamia. Although the region suffered a decline during the twelfth and eleventh centuries BCE, during which time the Kassite dynasty collapsed, the division of the land into two halves continued.

Babylon during the Assyrian Empire

During the time of weakness that marked the end of the Kassite period, yet another foreign people from the west, the Arameans, entered the land in large numbers, sometimes as immigrants, sometimes as invaders. But whereas the languages of the Amorites and Kassites seem to have been lost over time, the Semitic language of these new arrivals, Aramaic, began to replace the ancient language of Akkadian as the spoken tongue of the Mesopotamian

people. Aramaic was widely used in both Babylonia and Assyria, even though for centuries Akkadian remained the standard written language. Aramaic was to be the predominant language in the region until the spread of Arabic over 1,500 years later in the seventh century CE.

Between the end of the Kassite dynasty and the eighth century BCE, six local dynasties ruled Babylon, none of them able to achieve the type of power that had been characteristic of Hammurabi's dynasty or of the Kassite kings. They were sometimes on good terms with the Assyrians, but at other times they were hostile, especially as Assyria became more and more powerful.

The Assyrians seem always to have respected Babylonian culture and venerated Babylonian gods. Their powerful emperors generally treated the Babylonians with much more generosity than they did their other neighbors. But still, warfare often broke out between the two lands, with several Neo-Assyrian kings claiming

History is simply a piece of paper covered with print; the main thing is still to make history, not to write it. • OTTO VON BISMARCK-SCHOENHAUSEN (1815–1898)

direct control over Babylonia or placing puppet kings on its throne.

In the eighth century BCE a fourth major group of settlers and invaders appeared in Babylon. These were the Chaldeans, who came from the marshes in the south. Although they seem to have spoken the same Akkadian language as the local Babylonians, they were regarded as the enemies of the Babylonians for many years. Eventually, though, the Chaldeans, like the Kassites and Amorites before them, became rulers of Babylonia.

The Neo-Babylonian Period

The second great period of Babylonian dominance, the Neo-Babylonian period, came a thousand years after Hammurabi's empire collapsed. The Babylonians, collaborating with the Medes, overthrew the Assyrian empire in 612 BCE and took over control of much of the region. The dominant figure from this time was the Chaldean king of Babylon, Nebuchadnezzar II, who was both a conqueror and a prolific builder.

It is the Babylon of his reign that is the best known—a city of unprecedented size and grandeur. This is the city that was described by Herodotus and the one that has been excavated and partially reconstructed. The immense city walls were 18 kilometers long, with at least eight monumental gateways, and they surrounded an area of 850 hectares. Inside the city, the ziggurat (stepped tower) of the temple to Marduk, the Esagila, was built up to great height, visible from far and wide. It is believed to have been the inspiration for the Bible's story of the Tower of Babel. Unfortunately, it was completely dismantled in ancient times, so no one can reliably determine how tall the tower actually stood.

Everywhere, construction was of baked brick, not the usual sun-dried brick that had dominated Mesopotamian architecture for millennia. Whole regions of the city, such as the processional way leading to the Ishtar Gate, were faced with glazed bricks in a vivid blue, decorated with images of lions and dragons sculpted in relief and glazed in bright shades of yellow, black, and white.

Archaeologists have found no clear evidence for the famous Hanging Gardens, which are described in classical sources as terraced gardens on an artificial structure—a “wonder” because of the technology it would take to grow trees on top of a building. Nor did any contemporary source mention the gardens. Even Herodotus fails to mention them in his otherwise detailed description of Babylon. It has recently been suggested that these gardens were not, in fact, in Babylon, but were located in Assyria. The Assyrian king Sennacherib (reigned 704–681 BCE) boasted of creating just such a terraced garden, watered by an aqueduct, in his capital city of Nineveh.

The Neo-Babylonian period proved to be short-lived, lasting less than a century. The last of the Babylonian kings was an elderly, eccentric man named Nabonidus (reigned 555–539 BCE) who neglected the annual festival in honor of Marduk and who was deeply devoted to the moon god. The Babylonian population seems to have disliked him so much that they put up little resistance to the Persian emperor Cyrus II (c. 585–c. 529 BCE) when the latter invaded in 539 BCE.

Persian and Hellenistic Periods

Initially, under Cyrus and his successors on the throne of Persia, life in Babylon was relatively unchanged. Cuneiform documents that recorded the business transactions of Babylonian merchants and entrepreneurs show that Babylon was still a rich city. The kings of Persia spent their winters in Babylon and seem to have been well disposed to the place. This was true, at least, until the reign of Xerxes I (reigned 486–465 BCE). Xerxes was infuriated by a rebellion mounted by the Babylonians, and he took out his anger on the beautiful buildings of Nebuchadnezzar, even destroying the temple to Marduk. It is unclear whether the temple was ever properly rebuilt after that time. Xerxes imposed crushing taxes on the Babylonians once he had brought the rebellion under control.

When Alexander of Macedon (reigned 336–323 BCE) took over the Persian empire in 330 BCE, he seems to have fallen under Babylon's spell. He thought that it

would be one of his capital cities and had grand plans to rebuild the ziggurat of Marduk's temple. His workmen did succeed in dismantling the ruins of the earlier ziggurat, but a new one probably was not constructed before Alexander's death. The Macedonian king died in Babylon on 13 June 323 BCE, perhaps of malaria or alcohol poisoning.

Alexander's successor in Mesopotamia, the general Seleucus (reigned in Babylon 312–281 BCE), was less fond of Babylon. He built a rival city just 90 kilometers to the north and called it Seleucia; it became the Royal City in 275 BCE. Gradually trade and business activity began to move to Seleucia, making Babylon less relevant to the local or imperial economy. An edict issued by Antiochus I (281–261 BCE) required all Babylonian residents to move to Seleucia. It is clear, however, that they did not all obey, because Babylon continued to be occupied, though it was much less important than it had been. By the first century BCE, just a few buildings were left standing in Babylon, surrounded by the still-impressive city wall. The grand avenues that had once been flanked by tall buildings were gone, turned into grazing grounds for sheep and goats.

The Present

A German team of researchers began excavations in Babylon in the late nineteenth century. They excavated large areas of the Neo-Babylonian city and transported much of the Ishtar Gate to Berlin, where it can still be seen in the Pergamon Museum. Excavations have since continued under Iraqi leadership. In the late twentieth century, Saddam Hussein (b. 1937; president of Iraq 1979–2003), who saw himself as a modern-day Nebuchadnezzar or Hammurabi, had the Iraqi Antiquities Administration restore the ruins of Babylon to a semblance of their former glory. The result was a fascinating place to visit, though archaeologists lament the fact that many of the real archaeological ruins have been covered up by the modern reconstructed walls. Currently, Iraq is far from being a popular tourist destination, but it is possible that in the future visitors from around the world will

be drawn again to Babylon to see the remains of what was one of the world's greatest cities.

Amanda H. Podany

See also Hammurabi; Mesopotamia; Persian Empire

Further Reading

- Beaulieu, P.-A. (1995). King Nabonidus and the Neo-Babylonian empire. In J. Sasson (Ed.), *Civilizations of the ancient Near East* (Vol. 2, pp. 969–979). New York: Charles Scribner's Sons.
- Bryce, T. (1998). *Kingdom of the Hittites*. Oxford, UK: Clarendon Press.
- Cook, J. M. (1983). *The Persian empire*. New York: Schocken Books.
- Hallo, W. W., & Simpson, W. K. (1998). *The ancient Near East: A history* (2nd ed). New York: Harcourt Brace College Publishers.
- Herodotus. (1972). *The histories*. (A. de Selincourt, Trans.). New York: Penguin Books.
- Horsnell, M. J. A. (1999). *The year-names of the first dynasty of Babylon* (Vols. 1–2). Hamilton, Canada: McMaster University Press.
- Kuhrt, A. (1995). *The ancient Near East*. London: Routledge.
- Leick, G. (1999). *Who's who in the ancient Near East*. London: Routledge.
- Klengel-Brandt, E. (1997). Babylon. In E. M. Meyers (Ed.), *The Oxford encyclopedia of archaeology in the Near East* (Vol. 1, 251–256). Oxford, UK: Oxford University Press.
- Klengel-Brandt, E. (1997). Babylonians. In E. M. Meyers (Ed.), *The Oxford encyclopedia of archaeology in the Near East* (Vol. 1, 256–262). Oxford, UK: Oxford University Press.
- Nemet-Nejat, K. R. (1998). *Daily life in ancient Mesopotamia*. Westport, CT: Greenwood Publishing.
- Oates, J. (1979). *Babylon*. London: Thames & Hudson.
- Roaf, M. (1990). *The cultural atlas of Mesopotamia and the ancient Near East*. New York: Checkmark Books.
- Roth, M. T. (1997). *Law collections from Mesopotamia and Asia Minor* (2nd ed). Atlanta, GA: Scholars Press.
- Roux, G. (1980). *Ancient Iraq* (2nd ed). Baltimore: Johns Hopkins Press.
- Sasson, J. M. (1995). King Hammurabi of Babylon. In J. Sasson (Ed.), *Civilizations of the ancient Near East* (Vol. 2, pp. 901–915). New York: Charles Scribner's Sons.
- Snell, D. C. (1997). *Life in the ancient Near East*. New Haven, CT: Yale University Press.
- Sommerfeld, W. (1995). The Kassites of ancient Mesopotamia: Origins, politics, and culture. In J. Sasson (Ed.), *Civilizations of the ancient Near East* (Vol. 2, pp. 917–930). New York: Charles Scribner's Sons.
- Stiebing, W. H., Jr. (2003). *Ancient Near Eastern history and culture*. New York: Longman.
- Van de Mieroop, M. (1997). *The ancient Mesopotamian city*. Oxford, UK: Clarendon Press.
- Van de Mieroop, M. (2004). *A history of the ancient Near East, ca. 3000–323 BC*. Oxford, UK: Blackwell.

Baha'i

See also Babi and Baha'i

Balance of Power

The existence, or the lack, of a balance of power is an important factor in analyzing the politics, the diplomacy, the law, the commerce, and the culture of interactions between polities and peoples. A balance of power is characterized by *realpolitik* and by adversarial relationships rather than by consensus or a vision of an alternative to prevailing circumstances.

Competing political entities try to obtain as much power, explicit or implicit domination, economic influence, and diplomatic prestige as possible. Using every collaborative and coercive measure at their disposal, including violence, intimidation, and bribery, they vie for the same resources, technology, land, and people. Customarily, this struggle engages empires, but one may also speak of a balance of power between or among small countries and even minor principalities. When no state or group secures hegemony, a dynamic balance of power prevails.

Alliances

The need to create a balance of power in the face of a hegemonic force has often created alliances between two or more states, and sometimes leagues of cities, as with the sixth-century BCE Peloponnesian League, led by Sparta, which joined many Greek city-states in resistance to the Persians and later, in the Peloponnesian War (431–404 BCE), pitted those that aligned with Sparta against those that aligned with Athens. In alliances the joint interest is typically evident, but intentions vary. They may include one or more of the following: securing harmony and peace, strengthening collective security, facilitating prosperity, countering or neutralizing a hegemonic, aggressive, contesting, or emerging element that threatens current leaders, and the building of confidence in the governing political elites within member states. The groups competing for power may espouse similar or identical ideology, even shared religion, language and ethnicity. Affinity, however, did not necessarily translate into compromise. Because so many constellations of relationship among

polities can be described as a balance of power, what follows is just a select look at some illuminating examples.

The Ancient Middle East

A heavily militarized, frequently contested, balance of power existed among the major economic and military centers in the Fertile Crescent from 1500 to 550 BCE: Egypt, the Hittites (in present-day Turkey), and Mesopotamia (especially Assyria and then Babylon, now regions of Iraq). The competition for hegemony consistently engaged the shifting alliances of the numerous city-states between these empires, in contemporary Syria, Lebanon, Jordan, Israel, and the Palestinian territories. Diplomatic documents from the Egyptian archives in El-Amarna (from Akhenaten's reign, 1353–1336 BCE) depict a fragmented region that was highly contested.

During the height of the Assyrian empire in the eighth and seventh centuries BCE, kings such as Tiglath-Pileser III (reigned 745–727 BCE) and Sennacherib (reigned 705–681 BCE) absorbed regional powerhouses such as the Aramaic kingdoms and Israel. The Assyrians even reached Egypt, kept dependent states, and manipulated rulers in buffer areas. A balance of power thus existed not only between the major powers, but also among the small states that survived in the middle, such as Judea, Phoenician coastal cities in Lebanon, and a portion of Cyprus.

China

A pattern of alliances and counter-coalitions between competing empires was apparent also in pre-modern, divided China. It served as a precursor to the modern "Warlordism" that plagued China until 1949, when Mao's Communist Party prevailed.

One era was between 220–589 CE, known as the Age of Division. The Han Empire collapsed. The presence of three regional kingdoms caused the emergence of a balance of power. Northern China was ruled by the Wei Dynasty (386–534 CE) of the Yellow River Valley. The southeastern Wu controlled the fertile Yangzi Delta area. The southwestern Shu governed the Upper Yangzi River. A sequence of dynasties challenged, neutralized, and subsequently destroyed each other. In the fourth century, non-

Otto von Bismarck and the Balance of Power in Europe

The unification of Germany in 1871 was a monumental occasion in the history of Europe. It established the German Empire, and that fact along with the international balance of power in Europe during the next forty years has been largely credited to the political strategy of one man, Otto von Bismarck (1815–1898).

Bismarck was educated at several German universities and served for a short period of time in the Prussian civil service. However, his most important education came after witnessing the Revolution of 1848. The year 1848 saw a popular uprising of liberals in Germany. Bismarck opposed the liberal revolution in 1848, as he was a conservative. In 1851 Bismarck became the chief Prussian delegate to the Confederation's Diet. When the Crimean War with Austria broke out, Bismarck convinced the government to refuse to mobilize the troops of the German Confederation to help Austria in the Balkans. Bismarck saw no point to aligning with Austria, as it may have alienated other countries. Bismarck's advice was followed, and in 1859 he became a Prussian ambassador.

He was appointed Prussian Prime Minister in 1862 and began almost immediately to change the reactionary dictionary of the Prussian government. Traditionally, nationalism had been associated with liberalism, but Bismarck made a conservative nation-

alism a possibility. In a speech given to the Prussian legislature's Ways and Means Committee in October 1962, he stated that Germany would be united by "iron and blood," perhaps his most famous statement.

Three wars followed the Crimean: the Danish War, Austro-Prussian War, and Franco-Prussian War. In 1871 Bismarck became chancellor of Germany and also Prime Minister of Prussia. His title was defined in the Constitution of 1871, which established a national state where the Reichstag and government leaders took power away from dynastic kings. Bismarck had created a united German national state, although it is debatable whether German nationalism or Prussian power was more important in his campaign.

After these wars and after unification, Bismarck attempted to maintain peace in Europe through a series of alliances. The Three Emperors Alliance with Austria, Germany, and Russia was signed in 1873. It failed by 1878, but was quickly replaced by a Dual Alliance with Austria and eventually incorporated Italy, which was followed by the Reinsurance Treaty. None of the alliances would last however, and Germany was undecided in their foreign policy when Bismarck left office in 1890.

Source: Taylor, A. J. (1955). *Bismarck: The man and the statesman*. New York: Random House.

Chinese nomads, the Huns, exploited this weakness and conquered portions of China, shocking the culturally superior Chinese. Within the Huns, too, a fledgling balance of power emerged between the various tribes. Buddhism, adapted to Chinese culture, spread as a response to the brutality of violence, the political uncertainty, the economic misery, and the growing enslavement of farmers and city-dwellers.

Another complicated era is 1127–1279, during which the Southern Song dynasty conducted triangular warfare and conflicts ensued. The Songs vied for supremacy with the northern Jurchens, the ancestors of the modern Manchus. The Jurchens established the Jin (or Gold) Dynasty (1115–1234). The Western Xia (1032–1227), a kingdom formed by the Tanguts, constituted the third

group. Formally a tributary to either of the two stronger powers, the Xia leveraged their strategic location on trade routes and extraordinary diplomatic skills to survive until the Mongols annihilated them.

The Northern Songs previously combined forces with the Jurchens to defeat another adversary, the Khitan Liao (907–1125). The Jurchens, in turn, destroyed the Northern Songs (996–1127) then joined with remnants of the Khitans and the Huihe (modern Uighurs) to form the Jin Dynasty. The Southern Songs subsequently allied with Mongol forces against the Jurchen Jin. These Songs, in turn, tried to destroy the Mongols as soon as the Jurchen Jins were eliminated, but their overreach eradicated them. The rise of Genghis Khan as a unifying figure for all Turko-Mongol, then as the ruler of China in the early thirteenth

In war, three quarters turns on personal character and relations; the balance of manpower and materials counts only for the remaining quarter. • NAPOLEON (1769–1821)

century, may be attributed, in large part, to this prolonged divisiveness.

The Classic European Balance of Power

The classic Western balance of power existed in Europe from 1815, with the final defeat of Napoleon, until World War I began in 1914. A general will to prevent the rise of an alternative to the existing order through conflict resolution followed the decades of the Napoleonic wars, the restoration of the monarchy in France, and the partition of Poland between members of the “Holy Alliance” (Russia, Prussia and Austria).

Prince Klemens von Metternich (1773–1859), Austria’s minister of foreign affairs from 1819 until his forced resignation in 1848, is the person associated most strongly with this system. He strove for a balance of power between conservative powers after the radicalizing impact of the French Revolution (1789–1799) and was instrumental in instituting the congress system, whereby heads of state or emissaries from powers such as Austria, Great Britain, France, Prussia, Russia, and sometimes the Ottoman empire, would meet to forestall armed conflicts, suppress national movements, neutralize social activism, and prevent one strong country from dominating international affairs.

The Crimean War (1853–1856), initiated by Britain, France, and the Ottoman empire against Russia, was an example of a conflict perpetrated to maintain the balance of power by limiting Russian expansion. The rise of nationalism led after 1858 to wars that culminated with the unification of Italy and then Germany by 1871.

In particular, the establishment of a unified Germany as a continental powerhouse changed the balance of power to the disadvantage of France and the Habsburg empire. The diplomacy of Germany’s Otto von Bismarck (1815–1898) in the 1880s brought a short-term partnership with Russia and Italy and a long-term alliance with the Habsburg empire. With Britain withdrawn in “splendid isolation” in the 1890s, this led to decades of German supremacy. The growing fear from German ambitions brought the 1904 British-French Entente Cordiale,

joined by the Russians three years later. The Ottoman Turks, knowing that the British and the French had changed their priorities, then became closer to the Germans to counter Russia. This complex balance of power was a direct precursor to the eruption of World War I, when the Habsburg empire’s fear of a loss of face following the assassination of its archduke by a Serbian nationalist, coupled with strong German support, crushed the fragile peace.

Between the World Wars and after 1945

The 1919 Treaty of Versailles that ended World War I failed to reinstate a balance of power in Europe after World War I. On the contrary, the appeasement policy Britain and France pursued against Hitler’s Germany in the 1930s violated the traditional practice of a continental balance of power, though fears of German reemergence led to French attempts to collaborate with new central European countries such as Czechoslovakia and Yugoslavia. Partially as a result of Western powers’ failure to collaborate with the Soviet Union, World War II began in 1939.

The balance of power from the end of World War II until the collapse of the Soviet Union in 1991 was a bipolar stand-off between the U.S.-led Western camp, and the Soviet Union-led Communist bloc. Nuclear weapons, which had become a reality with the bombings of Hiroshima and Nagasaki, ushered in the concept of “mutually assured destruction (MAD),” a key element in the new global balance of power, probably assuring that no direct confrontation transpired between the superpowers. Both sides competed fiercely for partners in the nonaligned developing world.

In the 1990s, in the aftermath of the end of the Cold War, the United States clearly emerged as a hegemonic power. In the absence of a cohesive coalition to counter its technological, military, and economic supremacy, it reigned in international affairs. American puissance prevailed over European, Russian, Chinese and Japanese hopes for a global balance of power, although such a framework may emerge in the near future, especially if the

United States is viewed as aggressive and lacking compassion and given international unease at its foreign policy following the terrorist attacks of September 11.

Itai Nartzizenfield Sneh

See also Cold War; Containment; Détente

Further Reading

- Fields, L. B., Barber, R. J., and Riggs, C. A. (1998). Regionalism in South, Southeast, and East Asia. *The Global Past* (pp. 345–700). Boston: Bedford Press.
- Garrison, J. (2004). *America as empire: Global leader or rogue power?* San Francisco: Berret-Koehler Publishers.
- Jaipal, R. (1989). *Balance of power in the nuclear age*. Ahmedabad, India: Allied Publishers.
- Kennedy, P. (1987). *Rise and fall of great powers: Economic change and military conflict from 1500 to 2000*. New York: Random House.
- Luard, E. (1992). *Balance of power: The system of international relations, 1648–1815*. New York: St. Martin's Press.
- Redford, D. B. (2003). *Wars in Syria and Palestine of Thutmose III*. Leiden, Netherlands: Brill.
- Sheehan, M. J. (1996). *Balance of power: History and theory*. London: Routledge.
- Taylor, A. J. P. (1954). *Struggle for mastery in Europe, 1848–1918*. Oxford, UK: Clarendon Press.
- Vasquez, J. A. (1998). *Power of power politics: From classical realism to neo-traditionalism*. Cambridge, UK: Cambridge University Press.
- Wohlforth, W. C. (1993). *Evasive balance: Power and perceptions during the Cold War*. Ithaca, NY: Cornell University Press.
- Woodruff, W. (1980). *The struggle for world power and domination, 1500–1979*. New York: St. Martin's Press.

Bands, Tribes, Chiefdoms, and States

The differences among human societies around the world and through time are often striking and often challenge our understanding. Although a simple distinction between “primitive” societies and “civilization” has been popular and persistent in the West, this distinction obscures significant variation within the “primitive” category and has not been useful for investigating the proc-

esses that led to the development of civilization. When addressing such issues, anthropology has found that a model recognizing four levels of sociopolitical complexity—band, tribe, chiefdom, and state—has greater utility. These levels are based on cross-cultural ethnographic (relating to the study of cultures) data as well as archaeological evidence from both prehistoric and historic periods.

In this context complexity is seen as society's ability to integrate people into larger, more diverse groups and more densely populated communities. This ability is closely linked to political integration in the form of increasingly centralized decision making and hierarchical power relations and economic integration by which individuals and communities become less self-sufficient and more dependent on others for critical resources, including food. The classic model was first proposed by the U.S. anthropologist Elman Service (1915–1996) in 1962 and, with minor modifications, is still widely used by anthropologists and archaeologists as a generalized descriptive framework.

Bands

Bands are the smallest and least sociopolitically complex human groups. A band usually consists of related families who camp together and collaborate closely, rarely numbering more than one hundred people and frequently closer to one dozen or two dozen. Most bands are hunters and gatherers or foragers who do not use domesticated plants or animals for food. In order to exploit the wild foods available in their environments most efficiently, many bands are nomadic, moving within a large, vaguely defined territory to take advantage of seasonal bounties and allow declining resources time to recover. This strategy is generally feasible only when population densities are very low, and bands usually have densities below one person per 2.5 square kilometers.

When so much space and so few people exist, centralized political control is difficult: People avoid socially aggressive or disagreeable people by moving elsewhere or joining another band. Consequently no formal offices of leadership exist, group decisions require consensus, and



social relations are highly egalitarian; age, gender, and personal abilities are the primary determinants of social status. Some statuses—for example, those of shaman or healer, good hunter, good gatherer—are more valued, but these must be achieved by a person’s actions, and groups welcome as many talented people as they can attract. When coordination with other families or bands is necessary (during a communal hunt, for instance), such highly competent and respected people can become situational leaders. Their authority, however, ends when the situation does, and their attempts to dictate to others on unrelated points are not tolerated. When a more hierarchical society came into contact with such a group, the society expected to deal with a single “headman,” but—to the society’s frustration—this headman was not able to bind the whole group by its decisions and agreements.

Low levels of economic integration reinforce the difficulty of political control. Bands tend to use simple technologies by which every family can make all of the tools it needs to acquire the necessities of life. This material self-sufficiency encourages high levels of autonomy, and nomadism (as well as the lack of domestic animals to transport family possessions) discourages the accumulation of wealth. Economic relations are based almost entirely on the principle of reciprocity, the mutual exchange of food surpluses and symbolic, relationship-affirming gifts.

People often consider bands to be the original form of human society, the norm before the development of farming about 10,000 BCE. However, most bands inhabit marginally productive environments unsuitable for farming, and groups inhabiting more bountiful environments in the preagricultural past may have had more complex societies.

Tribes

In common usage the word *tribe* often refers to any “primitive” society, and so we hear of “tribal art” and “tribal warfare.” In Service’s model, however, *tribe* has a narrower, more specific meaning: A tribe consists of a number of small communities, often semiautonomous bands or villages, that consider themselves to be a collec-

tive unit. This unit usually numbers from hundreds to a few thousand people. Whereas some tribes are foragers, most practice horticulture (small-scale hoe or spade farming) or pastoralism (animal herding).

Tribes, like bands, have generally egalitarian social relations and informal leadership. The feature that distinguishes tribes from bands is the stronger sense of connection between a tribe’s constituent communities, as opposed to the more independent bands. Although these constituent communities retain significant levels of autonomy in day-to-day affairs, they come together in mutual support and act as one unit when under threat, which includes environmental stresses such as crop failure as well as competition from outsiders. This coordination is fostered by social groups who cross-cut the allied communities, creating and maintaining the interpersonal relationships that bind members of the tribe together. These allied communities can be kinship-based clans, age-grade divisions, and/or voluntary associations such as dance and curing societies.

In some more complex tribes, powerful people known as “Big Men” can emerge as local leaders. Like headmen, Big Men have achieved status and no formal authority; Their elevated status comes principally from their skill at manipulating reciprocity relationships. By accumulating surpluses of food and symbolic wealth, they are in a position to make loans and give gifts to others and demand social and political support until they have been repaid. Their positions are rarely hereditary, however, and because several people usually are competing for the status at any given time, little centralization of political control is seen.

Why Become Complex?

In bands and tribes each family meets its own basic subsistence needs. At higher population densities, by contrast, more sophisticated and costly technologies are necessary to intensify food production, and increased competition for resources increases the need for mediation and resolution of social conflicts, both internal and external. To meet these needs in a larger society, a variety of full-time specialists exists: craftspeople, secular and reli-

gious leaders, and warriors. These specialists support the larger society with their skills and services, permitting it to become more efficient, and in return are supported by the surplus production that their services make possible.

However, such specialization creates fundamental differences in access to resources and power within a society and provides the basis for hierarchical systems of social inequality. Although a perennial debate exists regarding the balance between the beneficial and exploitative facets of elite management of society (probably an unresolvable debate because that balance is different in each society and changes through time), experts broadly recognize the correlation between complex society and social inequality. As sometimes needs to be pointed out, states with egalitarian ideologies exist, but no egalitarian states exist. In fact, these internal sociopolitical divisions are precisely what make some societies more “complex” than others.

Chiefdoms

Chiefdoms have populations ranging from several thousand to hundreds of thousands of people. Although some chiefdoms may be supported by foraging in extremely rich environments, most rely on intensive agriculture or pastoralism, which provide the reliable food surpluses needed to maintain their comparatively small number of specialists. Scholars make a distinction between simple chiefdoms, which are smaller and have a single level of elites, and paramount chiefdoms, which have a hierarchy of chiefs and “chiefs over chiefs” who build larger polities (political organizations)—at the price of greater political instability as the different chiefly lineages compete for dominance.

Chiefdoms have social ranking by which high status is



Bedouin tribesmen in the Middle East pose for a photo in 1914. Tribe in this sense means a tribal form of political organization with several kinship groups forming a tribe.

normally ascribed or inherited rather than achieved. Certain families or lineages retain possession of high-status positions, which are a small number of full-time offices with formally recognized duties and powers. Political power is centralized, to a greater or lesser extent, in the hands of the ruling chief, who has the authority to make decisions for the whole group and to use coercion to

The Masai: One of Kenya's Living Treasures

The Masai are a very famous warrior tribe in southern Kenya whose lives center around herding cattle.

Masai are best known for their beautiful beadwork, which plays an essential element in the ornamentation of the body. Beading patterns are determined by each age-set and identify grades. Young men, who often cover their bodies with paints made of natural ingredients to enhance their appearance, may spend hours and days working on ornate hairstyles, which are ritually shaved as they pass into the next age-grade.

Masai are pastoralists—that is, their social and economic systems are based on raising livestock—and have resisted the urging of the Tanzanian and Kenyan governments to adopt a more sedentary lifestyle. They have demanded grazing rights to many

of the national parks in both countries and routinely ignore international boundaries as they move their great cattle herds across the open savanna with the changing of the seasons.

Cattle are central to the Masai's economy. They are rarely killed, but instead are accumulated as a sign of wealth and traded or sold to settle debts. Their traditional grazing lands span from central Kenya into central Tanzania. The Masai prefer to remain nomadic herdsman, moving as their needs necessitate. This is becoming more difficult in modern times as their open plains disappear. Despite what may seem to be a simple economy, Masai are well-known capitalists and have become notorious cattle rustlers. At one time young Masai warriors set off in groups with the

bring disruptive members in line. This authority is frequently legitimated by religion, by which the chiefly lineage has access to supernatural favor and power by virtue of divine ancestors whom “commoners” lack.

Chiefs also play an important role in the economic integration of their chiefdoms through redistribution, the collection—in the form of tribute or taxes—and management of surplus production. This surplus production supplies the chiefly lineage with its subsistence base, but it is also given back to society in the form of support for religious and craft specialists attached to the chief's household; feasting and gift giving that legitimate his position; funding for military action or the construction of aggrandizing monuments such as temples, palaces, or tombs; and the provision of survival rations in times of need.

States

Today every human being is part of a state. States, highly centralized and highly efficient polities, can integrate populations numbering from the hundreds of thousands to more than a billion. To maintain this level of intensification and control, states have sophisticated recording systems and rely on large numbers of specialists, who often congregate in cities. These cities—the word *city* coming from the Latin word *civitas*—and literacy are two

of the hallmarks of “civilization.” Only intensive agriculture can provide the food surpluses needed to feed the dense populations of cities.

Whereas chiefdoms may have only two social levels (chiefs and commoners), states have at least three: the “upper class” of ruling elites; the “middle class” of bureaucratic managers and merchants, who are often literate; and the “lower class” productive base, including most craft specialists and agricultural laborers. Such social statuses are ascribed; the possibility of social mobility distinguishes class societies, where mobility is possible, although rarely easy, from caste societies, where opportunities for changing one's social status can be virtually nonexistent. To maintain social order in their internally diverse, often multicultural, populations, states have formal legal codes and restrict the use of coercive force to their authorized agents. By assigning responsibility for conflict resolution to officers of the state rather than leaving it in the hands of private citizens, states minimize the disruption caused by kin-driven blood feuds and faction fighting that make large paramount chiefdoms so unstable.

States use redistribution to fund the state apparatus or government, but the dominant economic mode in society is market exchange. This exchange allows the government to divest itself of the often-onerous responsibility for

express purpose of acquiring illegal cattle. Found mainly in southern Kenya, the Masai believed that their rain God Ngai granted all cattle to them for safe keeping when the earth and sky split. Given their belief that cattle was given to the Masai, they are known to steal from other tribes. The Masai worship cattle because it is their main source of economic survival as opposed to education. Masai often travel into towns and cities to purchase goods and supplies and to sell their cattle at regional markets. Masai also sell their beautiful beadwork to the tourists with whom they share their grazing land.

Benjamin Kerschberg

Source: The Masai people. (n.d.). Retrieved August 20, 2004, from <http://website.lineone.net/~yamaguchi/culture/kencult.html>

the distribution of resources throughout its territory by encouraging private citizens to move local surpluses to less-favored regions in hopes of profit. States encourage market exchange by recognizing standardized units of exchange, such as an official currency, and tap into the wealth generated by this exchange through taxation.

A World of States

Given their ability to amass substantial labor and commodity surpluses, states have an enormous competitive advantage over nonstate societies. History and archaeology amply illustrate this fact and document the trend through time toward a smaller number of larger sociopolitical units. In the study of state formation a term—*secondary states*—exists for societies that become states under the influence or pressure of neighboring states. This trend is not uniformly upward, however: Numerous states have collapsed as the result of political and/or environmental instability. In these cases the affected populations restructured themselves at a lower level of sociopolitical complexity, often chiefdoms or tribes, that could be supported under the new conditions.

Nevertheless, this trend, which is widely but not unanimously seen as driven by population growth, has led to a dramatic loss of nonstate societies, especially during the last few centuries. Even a half-century ago ethnogra-

phers could find and study autonomous bands, tribes, and chiefdoms. Now, at the dawn of the twenty-first century, these levels of sociopolitical complexity are essentially extinct. As bands, tribes, and chiefdoms cease to exist as functional units, some scholars see this model and its hierarchical rankings as an exercise in legitimating inequality and maintaining the marginalized status of less-“complex” groups. For those people involved in the study of social complexity, however, the model continues to provide a utilitarian framework for understanding the social, economic, and political variation among societies.

Elizabeth A. Ragan

See also Foraging Societies, Contemporary; State, The

Further Reading

- Claessen, H. J. M., & Skalnik, P. (Eds.). (1978). *The early state*. The Hague, Netherlands: Mouton.
- Cohen, R., & Service, E. (Eds.). (1978). *Origins of the state: The anthropology of political evolution*. Philadelphia: Institute for the Study of Human Issues.
- Ehrenreid, R. C., Crumley, C., & Levy, J. E. (Eds.). (1995). *Heterarchy and the analysis of complex societies*. Washington, DC: American Anthropological Association.
- Feinman, G., & Neitzel, J. (1984). Too many types: An overview of sedentary pre-state societies in the Americas. In M. Schiffer (Ed.), *Advances in archaeological method and theory* (Vol. 7, pp. 39–102). New York: Academic Press.
- Fried, M. (1967). *The evolution of political society*. New York: Random House.
- Gilman, A. (1981). The development of social stratification in Bronze Age Europe. *Current Anthropology*, 22(1), 1–24.
- Johnson, A. W., & Earle, T. (2000). *The evolution of human societies: From foraging group to agrarian state* (2nd ed.). Stanford, CA: Stanford University Press.
- Kristiansen, K. (1991). Chiefdoms, states, and systems of social evolution. In T. Earle (Ed.), *Chiefdoms: Power, economy, and ideology* (pp. 16–43). Cambridge, UK: Cambridge University Press.
- Maisels, C. K. (1999). *Early civilizations of the Old World: The formative histories of Egypt, the Levant, Mesopotamia, India and China*. New York: Routledge.
- Price, T. D., & Feinman, G. M. (Eds.). (1995). *Foundations of inequality*. New York: Plenum Press.
- Redman, C. L. (1978). *The rise of civilization: From early farmers to urban society in the ancient Near East*. San Francisco: Freeman.
- Service, E. (1962). *Primitive social organization*. New York: Random House.
- Service, E. (1975). *Origins of the state and civilization: The process of cultural evolution*. New York: W. W. Norton.

Bantu Migrations

See Equatorial and Southern Africa, 4000 BCE–1100 CE

Barter

Barter may be loosely defined as transactions involving the direct exchange of goods and services. It stands in contrast to exchanges facilitated by money, which enable the acts of buying and selling to be separated. The conception and use of barter very firmly reflect the society in which it is employed. The way in which barter is understood and carried out in a Pacific society, for example, where it might be linked to social rites that govern relations with neighboring islands, is different from the use of barter in communities today in the United States, in which neighbors might exchange food preserves for help with plumbing.

The Characteristics of Barter

Trying to define barter with any precision is difficult. This is because barter transactions typically involve complex social relations (though a number of anthropologists have argued to the contrary, that barter is largely devoid of social ties). The social anthropologists Caroline Humphrey and Stephen Hugh-Jones, while recognizing that any attempt to provide a general definition or model of barter usually involves the loss of the crucial social context which conditions the act of barter, nevertheless suggest a number of characteristics.

Barter results from a demand for goods or services one does not already have. A man with a pig might want, for example, a canoe. The participants in the exchange are free and equal. Money, by which the value of the goods to be bartered might be measured, is not present; there is no independent means of judging the value of the items to be bartered. The two parties must come to an agreement that the items to be exchanged are of equal

value (a process in which bargaining is usually critical). Finally, the acts of buying and selling occur simultaneously, even though the completion of the transactions (delivering the goods, performing the service) may take some time.

Barter and the Study of the Economy

The traditional view of barter in European economics may be understood through the work of two men. The Greek philosopher Aristotle (384–322 BCE) provides the earliest surviving discussion of the role of barter in the development of exchange. His account (*Politics* Book I, chapter 9) is also important for its attempt to perceive the political and social implications of what might appear to be a simple economic process. The practice of exchange, he noted, did not exist in the earliest form of association—the household, which was self-sufficient—but arose when larger social groups developed and households began sharing things. The mutual need for different goods, he claimed, was the essential reason for these exchanges. For Aristotle the original purpose of barter was to re-establish nature's own equilibrium of self-sufficiency. But it was out of this exchange, he warned, that money-making arose—a practice which he regarded with disdain as contrary to nature, in that it served no useful purpose but simply promoted the accumulation of more wealth.

In *The Wealth of Nations* (1776) Adam Smith offered a more mechanical view of the function of barter. With the emergence of a division of labor, he argued, each man only produced a small part of the total range of goods he desired. They had to resort to barter, “which must frequently have been very much clogged and embarrassed in its operations” ([1776] 1998, 32) for a person could not always find someone with the goods required that wished to barter for what was on offer. As Smith explained it ([1776] 1998, 32):

One man, we shall suppose, has more of a certain commodity than he himself has occasion for, while another has less. . . . The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each of them be willing to purchase a part of it. But they

The Ready Barter System

As one form of exchange, barter is thought to be appropriate in certain situations. The following account describes how the Hudson's Bay Company in Canada attempted unsuccessfully to increase its fur trade with Native Americans by instituting a barter system in the early nineteenth century.

With the termination of competition in 1821 the Hudson's Bay Company was able to implement and test a number of policies to further its aims and to improve the drastically reduced trade in beaver, a legacy of the competition and overhunting during previous decades. One such course of action was to introduce what was termed the "Ready Barter System" of trade. This meant that instead of supplying Indians in the summer and early fall with trade items which were to be paid for in furs the following spring, as was formerly the practice on the "Debt System", (the widespread trading system prior to the 1820's) the Indians would exchange their furs directly for goods as they brought them to the post. Credit in advance was curtailed except in the case of a few small items. The main reason for the introduction of the ready barter system was to eliminate the accumulation of debts against Indians over several years. Furs brought to the post in the spring frequently did not amount to the same value as supplies obtained in the fall. Once in debt, Indians often became discouraged since their furs were taken to pay old accounts; hence, it became increasingly difficult to get out of debt since a hunter was always at least a year behind in his payments.

The ready barter system was first introduced at

Osnaburgh and the other Albany District posts in the winter of 1823–24. It had little effect upon the Indians until the following summer. Furs bartered directly were taken at a higher value than those received in exchange for debts. As stated by John Davis, in December 1823: Goods will in future be Bartered with the Indians you will perceive they will be supplied much cheaper than heretofore. but it is not intended they will be allowed advances in Debt at this rate but only in Trading their Hunts... after this winter nothing should be given in Debt but actual necessaries to enable them to hunt.

Davis indicated in his district report for 1824, that the new tariff and barter system would be better for the Indians although, advances on credit in articles of actual necessity for hunting can never be entirely done away with, as from the precarious mode of life the Indians lead, and their improvidence, cases must arise where advances on credit are necessary.

Both the Osnaburgh and Lac Seul Indians were apprehensive about the new system, especially the former who visited the post less frequently and who feared that they would be unable to obtain many trade items they formerly received in the fall. The Osnaburgh manager even feared that the Indians would leave to trade at Nipigon and elsewhere where the debt system was still in operation.

Source: Bishop, C. A. (1974). *The Northern Ojibwa and the fur trade: An historical and ecological study*. (pp. 118–120). Toronto: Holt, Rinehart and Winston of Canada.

have nothing to offer in exchange, except the different productions of their respective trades, and the butcher is already provided with all the bread and beer which he has immediate occasion for. No exchange can, in this case, be made between them.

In order to alleviate the inconvenience of barter, money was invented. Barter, for both Aristotle and Smith, is then constructed as a feature of economic activity in societies at their earliest stage of development.

Barter versus Gift Exchange

Barter played an important role in many non-European societies prior to contact and integration with modern Western economic systems. Its use (and the presence of different social and economic values) is often recorded by explorers: Captain Cook, for example, traded guns for pigs in the Marquesas Islands on his first visit in April 1744, but found the supply of pigs quickly dried up. Having no understanding of the important role of the animal

in commemorative feasts (which limited the number for sale), he assumed that he and his crew had simply oversupplied the market with guns.

Modern anthropologists recognize an important distinction between commodity exchange and gift exchange. They perceive barter as one form of commodity exchange (commodities are items that are sought after, such as animals or cars, that have both a use value and an exchange value). While the aim of commodity exchange is to obtain goods, the aim of gift exchange is to place the person (or group) that receives the gift under an obligation. The anthropologist Christopher Gregory, in a detailed study of this distinction, argued that commodity exchange establishes a relationship between the objects exchanged, while gift exchange establishes a relationship between the subjects making the exchange. Barter, as thus described, is identified as an exchange of items that are not tied to social systems (as gifts are) through the hands of more or less strangers. No form of dependence (social or political obligation) is supposedly created in these transactions. In reality the distinction is not so clear-cut. In situations where the exchange of gifts precedes the exchange of commodities, for example, a web of links ties the two types of exchange together. Indeed, simple acts of barter can often be part of a much more complex process of political, social, and economic interaction between people.

Barter Today

Barter is still a significant form of economic activity today, even in societies that use money. Despite the theories of Aristotle and Smith, barter cannot be associated merely with primitive economies. It is increasingly used by businesses: The International Reciprocal Trade Association in the United States claimed that in 2001 the barter of products between companies was worth over \$7.5 billion. There are numerous barter clubs and associations in the United States that facilitate low-level transactions, mostly involving household goods. But not all barter is associated with strong economies. In Argentina, for example, the depressed value of the currency, the closure of banks, and mass unemployment have contributed to an increased use of barter. *The Guardian*, a British

newspaper, reported on 25 April 2002 that with the shortages of cash, barter clubs emerged (sometimes located outside shopping centers) in Buenos Aires to enable people to exchange goods and services that they themselves made or supplied. Barter is thus very much a part of modern economic activity, both in strong economies and weak ones.

Kenneth Sheedy

Further Reading

- Aristotle. (1962). *The politics* (T. A. Sinclair, Trans.). Harmondsworth, UK: Penguin Books.
- Aristotle. (1976). *The Nicomachean ethics* (J. A. K. Thompson, Trans.). Harmondsworth, UK: Penguin Books.
- Gregory, C. A. (1982). *Gifts and commodities*. London: Academic Press.
- Gregory, C. A. (1997). *Savage money: The anthropology and politics of commodity exchange*. Amsterdam: Harwood Academic Publishers.
- Hart, K. (1986). Heads or tails: Two sides of the coin. *Man*, 21(4), 637–656.
- Humphrey, C. (1985). Barter and economic disintegration. *Man*, 20(1), 48–72.
- Humphrey, C., & Hugh-Jones, S. (Eds.). (1992). *Barter, exchange and value: An anthropological approach*. Cambridge, UK: Cambridge University Press.
- Parry, J., & Bloch, M. (1989). *Money and the morality of exchange*. Cambridge, UK: Cambridge University Press.
- Polanyi, K. (1968). *Primitive, archaic, and modern economies: The essays of Karl Polanyi* (G. Dalton, Ed.). New York: Doubleday.
- Smith, A. (1998). *The wealth of nations*. Oxford, UK: Oxford University Press. (Original work published 1776.)

Belief Systems

See Reader's Guide—Religion and Belief Systems

Benin

The empire of Benin was among Africa's most important, with roots going back to the eleventh century, and it lasted until its conquest by Britain in 1897. Benin, one among many large empires of the Guinea Belt (the forest region of the southern half of west Africa), was

located in the south-central part of what is now Nigeria (and not be confused with the modern nation of Benin).

Oral tradition reveals that the people of Benin (who now refer to themselves as “Edo”) migrated from the east. They likely settled first at Ile-Ife before founding Benin City around 1000 CE. Little is known of Benin’s earliest history. Oral tradition records thirty-one kings from the Ogiso dynasty, of whom Owodo was the last. Owodo was so cruel and inept that he was banished. The chiefs of Benin then ruled as a council with one of their own elected as ruler.

This oligarchic (relating to government by the few) experiment collapsed when the head of the chiefs attempted to make his position hereditary. Unable to resolve the crisis the people of Benin requested that a son from the royal house of Oduduwa, the mythical ruler of Ile-Ife, rule them. Oduduwa sent his son Oranmiyan. Historians debate whether the story of Oranmiyan represents dominance or conquest by the Yoruba people. Oranmiyan eventually left the city in frustration, and the next *oba* (the title by which the king of Benin was henceforth known) was his son, Eweka I. The *obas* of Benin claimed divine descent from Oranmiyan, and this pedigree was central to royal authority.

Political History and Transformation

Tension between the *oba* and the chiefs remained a central part of Benin’s politics. Ewuare was likely Benin’s most famous king and is credited with turning the kingdom into an empire. He came to power after a violent succession dispute and introduced a new level of militarism. Benin conquered many of its neighbors, including the western Igbo, some Yoruba kingdoms, and various riverine peoples of the Niger River delta. The empire was indirectly ruled; indigenous leaders were left in power so long as they paid tribute.

Ewuare redesigned the capital by separating the palace (*ogbe*) from the town (*ore*) by a broad avenue. The densely populated city of intersecting streets featured craftspeople, artisans, merchants, blacksmiths, and priests organized by guilds and age grades. Ewuare created two



important associations: Eghaevbo n’Ogbe (Palace Chiefs) and Eghaevbo n’Ore (Town Chiefs), who were his highest advisers, although none of the offices was hereditary. In time the Town Chiefs became a permanent source of opposition to the palace, particularly its head, the Iyase, who was commander of the army. Ewuare created an elaborate annual cycle of royal ceremonies and introduced coral beads as a symbol of royal power. A century of expansion continued after Ewuare under Ozolua, Esigie, and Orhoghua.

Royal power was supplemented by religious power from the head priests, the Osa and Osuan. The Emeru (Seven Caretakers of Sacred Brass Vessels) and Ooton (Seven Caretakers of Royal Ancestors) also lent their supernatural power to the *oba*. Like many peoples of the Guinea Belt, the people of Benin engaged in human sacrifice. Written accounts indicate that human sacrifice was restricted to royal rituals and involved a limited number of victims.

Succession disputes were common in Benin’s history. The royal line had become so dissipated by the seventeenth century that extreme competition developed among rivals. As the power of the *oba* weakened, the strength of the chiefs increased. This increase culminated during the late seventeenth century in a civil war between

The King of Benin

This description of the kingship of Benin by an early European traveler makes clear that kingship in Benin was just as powerful, wealthy, and adorned with the trappings of power as monarchy elsewhere in the world.

They were brought with a great company to the presence of the king, who, being a black Moor (1) (although not so black as the rest), sat in a great huge hall, long and wide, the walls made of earth without windows, the roof of thin boards, open in sundry places, like unto louvers to let in the air.

And here to speak of the great reverence they give to their king, it is such that, if we would give as much to Our Savior Christ, we should remove from our heads many plagues which we daily deserve for our contempt and impiety.

So it is, therefore, that, when his noblemen are in his presence, they never look him in the face, but sit cowering, as we upon our knees, so they upon their buttocks with their elbows upon their knees and their hands before their faces, not looking up until the king command them. And when they are coming toward the king, as far as they do see him they do show such reverence, sitting on the ground with their faces covered as before. Likewise, when they depart from him, they turn not their backs toward him, but go creeping backward with like reverence.

And now to speak somewhat of the communication that was between the king and our men, you shall first understand that he himself could speak the

Portugal tongue, which he had learned of (2) a child. Therefore, after he had commanded our men to stand up, and demanded of them the cause of their coming into the country, they answered by Pinteado that they were merchants, traveling into those parts for the commodities of his country for exchange of wares, which they had brought from their countries, being such as should be no less commodious for him and his people. The king, then, having of old lying in a certain storehouse 30 or 40 quintals of pepper (every quintal being a hundred weight), willed them to look upon the same, and again to bring him a sight of such merchandise as they had brought with them. And thereupon sent with the captain and the merchants certain of his men to conduct them to the waterside with others to bring the wares from the pinnacle to the court. Who, when they were returned and the wares seen, the king grew to this end with the merchants to provide in 30 days the lading of all their ships with pepper. And in case their merchandise would not extend to the value of so much pepper, he promised to credit them to their next return, and thereupon sent the country round about to gather pepper, causing the same to be brought to the court. So that within the space of 30 days, they had gathered fourscore tons of pepper.

Source: Eden, R. (1555). *Decades of the New World*. Retrieved August 20, 2004, from http://www.wsu.edu:8080/~wldciv/world_civ_reader/world_civ_reader_2/eden.html

obas Ewaukpe and Akenzua and Ode, who was the Iyase. The war strengthened the power of the Ezomo, a chief who controlled the village of Uzebu. The Ezomo gained the right to appoint his own chiefs, becoming, in essence, a secondary *oba*. From this period onward royal art grew increasingly important and innovative as it became a political tool to assert royal control. Benin emerged from the civil war stable and prosperous for most of the latter half of the eighteenth century. The political history of Benin during the nineteenth century consisted of complex interplay between the *oba*, Ezomo, Eghaevbo n'Ogbe, and Eghaevbo n'Ore.

Benin and Africa

Military might largely held the Benin empire together. In an indirectly ruled empire local leaders had a large degree of autonomy. Benin's military ensured that local leaders paid their tribute. Local rulers did sometimes break way from Benin, as the trading state of Warri did during the nineteenth century. Relations with various Yoruba kingdoms to the north were often violent, particularly with the growth of the areas of Ilorin, Oyo, and Nupe during the seventeenth and eighteenth centuries. Benin served as a nexus for trade goods from throughout the region, including textiles, beads, slaves, ivory, pepper, coffee,

palm oil, woods, leather goods, horses, and salt. Via Hausaland, Benin participated in trans-Saharan trade.

Benin and the World

Benin's first contact with Europeans came during the reign of Ewuare. The first visitors were impressed with what they saw and remarked on the hospitality of the people, the safety of the streets, and the high standard of living and cleanliness. Records show that the people of Benin probably lived as well as people in any major city of the time. Europeans of the sixteenth through eighteenth centuries saw Benin as a sophisticated civilization. The Portuguese sent Catholic missionaries to Benin during the reign of Esigie, but few converts were gained.

As European interest in African slaves grew, Benin participated in the transatlantic slave trade. Although a significant source of income, trading in slaves never dominated Benin's economy, nor was it related to Benin's territorial expansion. Scholars traditionally argued that the slave trade lowered the value of human life in Benin, leading to an increase in the volume of human sacrifice. Current scholarship suggests that nineteenth-century European accounts of widespread human executions were exaggerated to justify conquest. Despite heavy resistance, the British captured Benin in 1897 and integrated it into the British protectorate of Nigeria. This conquest ended the *oba's* political power, but the institution of the *oba* continued. The memory of the empire of Benin remains important in south-central Nigeria, and the *oba* retains great ritual and symbolic importance.

Joel E. Tishken

Further Reading

- Ben-Amos, P., & Girshick, P. (1999). *Art, innovation, and politics in eighteenth-century Benin*. Bloomington: Indiana University Press.
- Ben-Amos, P., Girshick, P., & Thornton, J. (2001). Civil war in the kingdom of Benin, 1689–1721: Continuity or political change? *Journal of African History*, 42, 353–376.
- Bradbury, R. E., & Lloyd, P. C. (1964). *The Benin kingdom and the Edo-speaking peoples of south-western Nigeria*. London: International African Institute.
- Bradbury, R. E., & Morton-Williams, P. (Eds.). (1973). *Benin studies*. London: Oxford University Press.

- Dapper, O., & Jones, A. (1998). *Olfert Dapper's description of Benin (1668)*. Madison: University of Wisconsin.
- Egharevba, J. U. (1968). *A short history of Benin* (4th ed.). Ibadan, Nigeria: Ibadan University Press.
- Ekeh, P. P. (2000). Contesting the history of Benin kingdom. *Research in African Literatures*, 31(3), 147–170.
- Kaplan, F. S., & Shea, M. A. (1981). *Images of power: Art of the royal court of Benin*. New York: New York University Press.
- Nevadomsky, J., & Aisien, E. (1995). The clothing of political identity: Costume and scarification in the Benin kingdom. *African Arts*, 28(1), 62–73.
- Okpewho, I. (1998). *Once upon a kingdom: Myth, hegemony, and identity*. Bloomington: Indiana University Press.

Berlin Conference

The Berlin West African Conference of 1884–1885 was the result of a joint initiative of German chancellor Otto von Bismarck (1815–1898) and French prime minister Jules Ferry (1832–1893), undertaken in response to the Anglo-Portuguese Treaty of 26 February 1884 by which Britain recognized Portuguese sovereignty over the entire mouth of the Congo River. France and Germany were opposed to this unilateral action, and they invited Great Britain and Portugal to take part in an international conference to be held in Berlin. The conference was to deal with freedom of trade in the basin and mouth of the Congo, with freedom of navigation on the Congo and the Niger, and with defining the formalities to be observed when taking possession of new territories on the African coast. After Britain and Portugal agreed to participate, other countries were also invited to attend, beginning with those having interests in the regions concerned—the Netherlands, Belgium, Spain, and the United States. The International Congo Association, although a non-state actor with ostensibly humanitarian aims, but in reality an instrument for Belgian King Leopold II's imperialist ambitions and a check on colonialist activities that could threaten Belgium's neutrality, was also present. The remaining nations were invited purely for show, or, as the letter of invitation more elegantly put it, “to ensure general agreement on the conference resolutions.” These countries were Austria-Hungary,

A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality. • KARL MARX (1818–1883)

Sweden-Norway, Denmark, Italy, Turkey, and Russia. The invitations went out in October and the conference opened on 15 November 1884.

The Conference

Already during the opening session the British representative, Edward Malet, made it clear that Britain considered the Niger as her exclusive sphere of influence and therefore refused to discuss it on a par with the Congo. With Britain indisputably the paramount power on the Niger, the others agreed, and thus in actual practice the Berlin West African Conference became the Berlin Congo Conference, the name by which it is now generally known. Two important points remained to be dealt with: determining the size of that part of the Congo area where free trade would be the rule, and the formalities for new occupations on the African coasts.

The general feeling of the conference was that the free-trade area should be as large as possible. The result was that two free-trade zones were approved. The first was defined as “the basin of the Congo and its tributaries” and stretched from the Atlantic to the Great Lakes in the Great Rift Valley of east central Africa. On the coast the northern boundary was fixed at 2°30' S, while the mouth of the Loge River was adopted as the southern limit. This coastal outlet was therefore fairly narrow, but immediately behind it the region fanned out broadly to the north as well as to the south. To the east of it lay the other free-trade area, termed the eastern maritime zone, which stretched from the Great Lakes to the Indian Ocean. Its northern coastal boundary was fixed at 5° N and its southern boundary at the mouth of the Zambezi River. The two free-trade territories, the Congo basin and the eastern zone, were jointly referred to as the conventional Congo basin.

The last item on the agenda was the formalities for new occupations. This point is the most important historically, because it has given root to the theory that at the Berlin Conference Africa was divided up by the European powers. This is not true. As the invitation letter indicated, the conference was only to deal with new occupations,

not already existing ones, and only with the African coasts, not with the interior. These restrictions are quite understandable. About the interior Europeans and Americans knew next to nothing, and in order to deal with the already existing claims, they would have had to make an inventory of all the regions concerned and all the powers involved. When one delegate suggested doing that, the French ambassador observed that that would be “tantamount to a partition of Africa,” which was not within the competence of the conference. Therefore it was decided, that the conference should stick to the text of the letter of invitation and only deal with *new* occupations on the African *coasts*. Therefore in the General Act of the Conference it was laid down that any signatory of the Act that was taking possession of a new coastal region or setting up a protectorate over it had to notify the other signatories of its actions and to exercise a measure of effective authority. However, in light of the fact that scarcely any coastal parts remained unoccupied, in practice this proviso meant virtually nothing.

Implications of the Berlin Conference

The Berlin Conference has often been described as the conference where Africa was divided up by the Europeans. The first president of Ghana, Kwame Nkrumah, for example, wrote, “The original carve-up of Africa was arranged at the Berlin Conference.” Many textbooks, too, have expressed this mistaken point of view. Africa was not only not divided at Berlin, but the subject was not even on the agenda; indeed, the idea of a partition of Africa was explicitly rejected by the conference.

There was, however, some partitioning going on in Berlin, not at the conference but in the corridors. That was an altogether different business, one not of principles and international law but of negotiating and horse-trading. That was not a matter of conference diplomacy, meaning multilateral diplomacy, but of bilateral diplomacy, and though it took place *during* the conference, it did not take place *at* the conference. The Congo Free State founded by Leopold II of Belgium, for example, was

seeking recognition and acceptance of its borders. Some of that business had already been done before the conference opened, but the most important bilateral treaties between the Free State and the Western powers were signed in Berlin. The result of this was the creation of one of the biggest European colonies in Africa, the Congo Free State, which would later become the Belgian Congo.

H. L. Wesseling

Further Reading

- Crowe, S.E. (1942). *The Berlin West African Conference, 1884–1885*. London: Longmans.
- De Courcel, G. (1935). The influence of the Berlin Conference of 1885 on international rights. Paris: Les Éditions internationales.
- Förster, S., Mommsen, W. J., & Robinson, R. (Eds.). (1988). *Bismarck, Europe and Africa: The Berlin African Conference, 1884–1885, and the onset of partition*. Oxford, UK: Oxford University Press.
- Gavin, R. J., & Betley, J. A. (Eds.). (1973). *The scramble for Africa: Documents on the Berlin West African Conference and related subjects, 1884–1885*. Ibadan, Nigeria: Ibadan University Press.
- Keith, A. B. (1919). *The Belgian Congo and the Berlin Act*. Oxford, UK: Clarendon Press.
- Nkrumah, K., (1967) *Challenge of the Congo*. New York: International Publishers, x.
- Stengers, J. (1953). *Regarding the Berlin Act, or How a legend is born*. *Zaire*, 8, 839–844.
- Wesseling, H. L. (1996). *Divide and rule. The partition of Africa, 1880–1914*. Westport, CT: Praeger Publishers, 114, 118.

Biological Exchanges

During most of the history of life on Earth, geographic barriers, such as oceans and mountain chains, inhibited migrations and divided the planet. Only birds, bats, flying insects, and good swimmers consistently bucked the trend. A few other species did so occasionally, thanks to sea-level changes and land bridges or to chance voyages on driftwood. However, for most species most of the time, biological evolution took place in separate biogeographical provinces.

Intracontinental Biological Exchange

This long phase of separation ended when human beings began their long-distance migrations. Deep in prehistory hominids (erect bipedal primate mammals) walked throughout Africa and Eurasia, occasionally bringing a plant, seed, insect, microbe, or rodent to a place it would not have reached on its own. With plant and animal domestication ten thousand to twelve thousand years ago, people began to transport such things on purpose and more frequently. Most of the plants and animals susceptible to domestication lived in Eurasia, and those sensitive to climate or day length (several flowering plants take their cues to bloom from day length) spread most easily along the east-west axis of that continent. The sets of domesticated plants and animals on which Eurasian and north African agriculture and herding are based spread almost instantaneously by the standards of the past, although in fact the spread took a few millennia. This process of spreading no doubt proved highly disruptive biologically as local biogeographic provinces were invaded by alien creatures that humanity spread. It also proved highly disruptive historically, obliterating peoples who did not adapt to the changing biogeography, the changing disease regimes, and the changing political situations brought on by the spread of farmers, herders, and eventually states. Out of this turmoil of Afro-Eurasian biological exchange emerged the great ancient civilizations from China to the Mediterranean. They all based their societies on intersecting but not identical sets of plants and animals.

Biological homogenization within Afro-Eurasia had its limits. The links between north Africa, say, and east Asia before 500 BCE were slender. Varying topography and climate also checked the spread of species. The process presumably accelerated when interregional contacts flourished, for example, when large states created favorable conditions for the movement of goods and people. The era of the Han dynasty (206 BCE–220 CE) in China and the Roman empire, for example, when the trans-Asian Silk Road was a well-beaten path, unleashed a small



flood of biological exchanges. The Mediterranean acquired cherries at this time, and possibly smallpox and measles, too; sorghum made its way from east Africa to India to China, and grapes, camels, and donkeys arrived in China from southwest Asia and north Africa.

Within Eurasian history two more moments of heightened biological exchange occurred. The next moment occurred during the early Tang dynasty (618–907 CE) in China. The Tang rulers came from various ethnic and cultural traditions and for a century and a half showed keen interest in things foreign: trade, technology, culture (e.g., Buddhism), and plants and animals. The court imported exotica: curious creatures, aromatic plants, ornamental flowers. Much of this exotica was inconsequential in social and economic terms, but some of it, such as cotton (imported from India), was not. The Tang were culturally receptive to strange plants and animals, but political conditions helped too: Their political power on the western frontier, and the geopolitical situation generally before 750, promoted the trade, travel, and transport that make biological exchange likely. For roughly a century and a half (600–750) the numerous political organizations of central Asia were frequently consolidated into only a few, simplifying travel by lowering protection costs. A handful of large empires held sway throughout central Asia, making the connections between China, India, and Persia (Iran) safer than usual. This geopolitical arrangement fell apart after 751, when Muslims defeated Tang armies, and after 755, when rebellion shook the Tang dynasty to its foundations. Thereafter, both the stability of the geopolitical situation and the receptivity of the Tang to things foreign changed, waned more often than waxed, and the opportunities for biological exchange grew scarcer.

Another moment of heightened biological exchange within Eurasia occurred with the Pax Mongolica (Mongol Peace) of the thirteenth and fourteenth centuries. By this time most of the feasible exchanges of plants and animals had already taken place. However, the heightened transport across the desert-steppe corridor of central Asia may have brought carrots and a species of lemon to China and a form of millet to Persia. Quite possibly this transport also allowed the quick diffusion from central

Asia of the bacillus that causes bubonic plague, provoking the famous Black Death, the worst bout of epidemics in the recorded history of western Eurasia and north Africa. Plague may also have afflicted China during these centuries, although the evidence is ambiguous.

Although this process of Eurasian (and north African) biological exchange never truly came to an end, it slowed whenever political conditions weakened interregional contacts. It also slowed in general after around 200 CE, with the erosion of two eras of peace—the Pax Romana (Roman Peace) and Pax Sinica (Chinese Peace), which had so encouraged long-distance travel and trade within Eurasia. By that time sugarcane had taken root in India, spreading from its New Guinea home. Wheat had spread widely throughout most of its potential range, as had cattle, pigs, horses, sheep, and goats. Less and less was left to do even when political and economic conditions encouraged biological exchange.

Meanwhile, on other continents similar, if smaller-scale, processes of biological exchange and homogenization were in train. In the Americas maize spread from its Mesoamerican (region of southern North America that was occupied during pre-Columbian times by peoples with shared cultural features) home both north and south, slowed, it seems, by difficulties in adapting to different day lengths at different latitudes. In Africa the Bantu migrations of two thousand years ago probably diffused several crops throughout eastern and southern Africa and possibly brought infectious diseases that ravaged the indigenous, previously isolated, populations of southern Africa. These events in Africa and the Americas, too, must have been biologically and politically tumultuous, although the evidence is sparse.

In biological terms the process of human-promoted biological exchange selected for certain kinds of species, those that co-existed easily with human activity: domesticates, commensals (organisms that obtain food or other benefits from another without damaging or benefiting it), and plants that thrive on disturbed ground, most of which we usually call “weeds.” These species prospered under the new regimes of expanded human migration and interaction. From their point of view, history had

Cassava in Africa

Cassava (manioc, tapioca) is a root crop native to South America that was exported to sub-Saharan Africa by European colonists. It thrived in Africa and became a major food source, in part because it is drought resistant and can be grown easily. The following account by British anthropologist Audrey Richards describes how the Bisa and Bemba peoples of Zambia use religion to protect their crops.

To protect their distant gardens from theft the Bemba resort to supernatural means only. Protective magic is used, but only to a small extent. It is interesting to find that the Bisa, whose staple crop is cassava, which is readily stolen as it remains in the ground all the year round, regularly place in their gardens charms designed to afflict a possible thief with different types of illness. This Custom, known as *ukuamba*, seemed to be universally practised on Cilubi Island. A man leaving home for a period would plant in a prominent place a stake with magic attached to it, and so strong was the belief in its powers that the owner himself was afraid to dig up the cassava on his return without first removing the charm. Among the Bemba, where the staple crop is less frequently stolen, such forms of

protective magic seem to be, comparatively speaking, rare. Charms to be burned in a field to produce various diseases such as elephantiasis in garden thieves were described to me, but I never heard frequently of their use. In such cases I was told the culprit could only hope to recover if he confessed his guilt. A far more common practice is the use of a special form of curse, *ukulapishya*, uttered after a theft has been committed, not before. This is done when gourds or pumpkins are disappearing from a garden and the thief is unknown. I have heard such curses uttered constantly during the hunger months, when the pilfering of vegetables is quite frequent, and a woman has no means of guarding them. The usual procedure followed was to announce in a loud shout in the quiet of an evening some such statement as, "All you people, listen! One of my pumpkins went yesterday and another the day before. Now I am angry. I am really going to curse. Tomorrow I am going to curse. Really and truly I am."

Source: Richards, A. I. (1935). *Land, labour, and diet in northern Rhodesia: An economic study of the Bemba Tribe*. Oxford, UK: Oxford University Press.

taken a favorable turn. Indeed, humanity was in a sense working for them, spreading their genetic footprints far and wide within the continents and into the future.

Biological Exchange and Biological Invasion

Intercontinental biological exchange also has a long pedigree. The first people to migrate to Australia may have accidentally brought some species with them forty thousand to sixty thousand years ago. About thirty-five hundred years ago, later migrants to Australia purposely brought the dingo (a large dog), the first domesticated in Australian history. The dingo quickly spread to all Aboriginal groups outside of isolated Tasmania and also formed feral packs. It proved an effective hunting dog and led to the extinction of some indigenous mammals. The dog (not the dingo) was also the first domesticated animal in the Americas, brought across the Siberian-Alaskan land

bridge with some of the first settlers during the last Ice Age. Here dogs probably played a significant role in reducing the populations of large mammals, many of which became extinct soon after humans arrived in North and South America. Initial human settlement of unpopulated islands also wrought major ecological changes throughout the southwest Pacific and Polynesia, including numerous extinctions, from about four thousand years ago until the colonization of New Zealand roughly seven hundred or one thousand years ago.

All of these instances were invasions of "naive" lands—continents and islands that had no prior exposure to humanity and its fellow travelers or to the intensified fire regimes that human presence normally brought. This fact helps to explain the dramatic effects, particularly the rash of extinctions, that followed upon human settlement of Australia, New Zealand, and the Americas.

Eventually people began to transport animals, plants,

History, real solemn history, I cannot be interested in. . . . I read it a little as a duty; but it tells me nothing that does not either vex or weary me. The quarrels of popes and kings,

and pathogens from one human community to another across the seas. In many cases the only evidence for such transfers is the existence of the imported species. The sweet potato, a native of South America, somehow arrived in central Polynesia by 1000 CE and subsequently spread widely throughout Oceania (lands of the central and southern Pacific). It is a delicate crop and could not survive a driftwood voyage: No one doubts that people transported it, although no one knows just when, how, or even who. It eventually became a staple food in the western Pacific, highland New Guinea, and to a lesser extent the east Asian archipelagoes and mainland.

A second mysterious transoceanic crop transfer took place across the Indian Ocean some time before 500 CE. Somebody brought bananas, Asian yams, and taro to east Africa. These crops had much to recommend them because they do well in moist conditions, whereas the millets and sorghum that Bantu expansion brought into central and southeastern Africa were adapted to dry conditions. Plantains, of which bananas are one variety, had existed in the wild from India to New Guinea. Linguistic and genetic evidence suggests they arrived on the east African coast as early as three thousand years ago and reached the forest zone to the west of Africa's Great Lakes around two thousand years ago, just about the time of the Bantu migrations. Quite possibly the success of Bantu speakers, often attributed to their use of iron, owed something to their successful adoption of these exotic crops. As relative newcomers to east and southern Africa, they had less invested in prevailing ecological patterns and fewer disincentives to experiment. Bananas, taro, and yams were probably introduced to east Africa more than once and almost surely were brought again in the settlement of Madagascar that took place soon before 500 CE. These Asian crops assisted in the epic (but unrecorded) colonization of central Africa's moist tropical forests by farmers, as well as in the settlement of Madagascar.

Several other significant intercontinental biological transfers took place before 1400 CE, mainly between Africa and Asia, a route that posed minimal obstacles to sailors. Africa's pearl millet, derived from a west African savanna grass, is the world's sixth-most-important cereal

today. It was introduced into India three thousand years ago and today accounts for about 10 percent of India's cereal acreage. East African sorghum entered India at about the same time and eventually became India's second-most-important grain after rice. Sorghum stalks were also useful as fodder for India's cattle. Finger millet, also from Africa, arrived in India only around one thousand years ago. It became the staple in Himalayan foothill communities and in far southern India. The transfer of African crops to south Asia mainly provided India with drought-resistant dryland crops, opening new areas to settlement and providing a more reliable harvest where water supplies were uncertain. These examples suggest a lively world of crop exchange—and probably weeds, diseases, and animals, too—around the Indian Ocean rim from about three thousand to fifteen hundred years ago. The regular monsoon winds of the Indian Ocean helped make this region of the world precocious in its maritime development and hence biological exchange.

Whereas south Asia received new crops from Africa, it sent new crops to the Middle East and the Mediterranean. Between the tenth and thirteenth centuries Arab trading networks, facilitated by the relative peace supervised by the Abbasid dynasty (749/750–1258), brought sugar, cotton, rice, and citrus fruits from India to Egypt and the Mediterranean. These plants, and the cultivation techniques that came with them, worked a small revolution on the hot and often malarial coastlands of north Africa, Anatolia in Turkey, and southern Europe. They caused many coastal plains to be brought under cultivation on a regular basis, often for the first time since the Roman empire. Sugar and cotton could flourish with unskilled and unmotivated slave labor; their introduction may have quickened the slave raiding that kept Mediterranean and Black Sea populations anxious for centuries. Keeping an army of laborers at work on deadly malarial coasts—in the Levant (countries bordering on the eastern Mediterranean), Egypt, Cyprus, Crete, Sicily, Tunisia, and Andalusia in Spain, to mention a few centers of sugar production—required constant topping up from poorly defended peasantries. This quest took slave merchants and raiders to the Black Sea coasts but also across the

with wars and pestilences in every page; the men all so good for nothing, and hardly any women at all—it is very tiresome. • JANE AUSTEN (1775–1817)

Sahara Desert and along Africa's Atlantic coast. Saadian Morocco, a state originally based on plantations in the Sous and Draa River valleys, brought sugar and African slaves together in a profitable mix that would soon be transplanted to Atlantic islands such as the Canaries and Madeira and then to the Americas.

A second avenue of exchange linked the Mediterranean basin to west Africa. Although this exchange was not genuinely intercontinental, the Sahara Desert for several millennia functioned somewhat like a sea, as the Arabic term for "shore" (*sahel*) for the west African desert edge implies. A thousand years before Christopher Columbus crossed the Atlantic, some unknown soul crossed the Sahara, reuniting the Mediterranean and the *sahel*, which the increasingly arid Sahara had divided since about 3000 BCE. Trans-Saharan trade developed in salt, slaves, and gold. However, this reunification no doubt included a biological dimension. Large horses seem to have made their debut in west Africa via trans-Saharan trade. Linguistic evidence suggests they came from the Maghreb region in the north. Horses eventually became a decisive element in a military revolution in the *sahel*, creating a mounted aristocracy who by the fourteenth century built imperial states. The Jolof, Mali, and Songhai empires of west Africa depended on horse cavalry, which undergirded their military power and, via slave raiding, their economies. When ecological conditions permitted, these empires bred their own war horses, and when conditions did not permit, the empires had to import them, usually from Morocco. In any case, the social, economic, and political history of west Africa took a new direction with the arrival of big horses.

These events show that long before the great age of oceanic navigation, the links of trade and colonization in the Pacific Ocean, in the Indian Ocean, and across the Sahara Desert brought biological exchanges that powerfully influenced the course of history. The further exchanges attendant upon the voyages of Columbus, the Portuguese navigator Ferdinand Magellan, the British sea captain James Cook, and others extended this process, wrenchingly, to lands formerly quite separate in biological (as in other) terms.

Biological Globalization

After 1400 CE mariners linked almost every nook and cranny of the humanly inhabitable Earth into a biologically interactive unit. The world's seas and deserts no longer isolated biogeographical provinces. The world became one without biological borders as plants, animals and diseases migrated wherever ecological conditions permitted their spread, although how soon and how thoroughly they did so often depended on patterns of trade, production, and politics.

Columbus inaugurated regular exchanges across the Atlantic whereby the Americas acquired a large set of new plants and animals as well as devastating diseases that severely depopulated the Americas between 1500 and 1650. Simultaneously Africa and Eurasia acquired some useful crops from the Americas, most notably potatoes, maize, and cassava (manioc). Ecosystems and societies in the Americas were remade with new biologies and new cultures. However, the same was true, if less catastrophically, in Africa and Eurasia. The new food crops fed population growth in Europe and China and possibly in Africa, too (no firm evidence exists). Maize and potatoes changed agriculture in Europe, and maize and sweet potatoes did so in China, allowing more intensive production and allowing lands not suited to wheat, barley, rye, or rice to come into production. In Africa maize, cassava, and peanuts became important crops. Today 200 million Africans rely on cassava as their staple food. Many of the rest, mainly in the south and east, rely on maize.

These modern biological exchanges had political meanings and contexts. European imperialism, in the Americas, Australia, and New Zealand, simultaneously promoted, and was promoted by, the spread of European (or more usually Eurasian) animals, plants, and diseases. Europeans brought a biota (the flora and fauna of a region) that worked to favor the spread of European settlers, European power, and Eurasian species and thereby to create what Alfred Crosby, the foremost historian of these processes, called "neo-Europes"—including Australia, New Zealand, most of North America, southern Brazil, Uruguay, and Argentina.

I have but one lamp by which my feet are guided, and that is the lamp of experience. I know no way of judging of the future but by the past. • EDWARD GIBBON (1737–1794)

Beyond the neo-Europes, in the Americas something of a neo-Africa emerged. More than 10 million Africans arrived in the Americas in slave ships. In those same ships came yellow fever and malaria, which profoundly influenced settlement patterns in the Americas. The ships also brought west African rice, which became the foundation of the coastal economy in South Carolina and Georgia during the eighteenth century and was important in Suriname in South America as well. Other African crops came, too: okra, sesame, and (although not in slave ships) coffee. African biological impact on the Americas did not cease with the end of slave trade. Much later African honeybees imported into Brazil crossbred to create an “Africanized” bee that since the 1950s has colonized much of the Americas.

The age of sail brought the continents together as never before. However, sailing ships did not prove hospitable carriers to every form of life. They filtered out a few, those that could not for one reason or another survive a long journey or that required conditions that sailing ships could not provide. The age of steam and then the age of air travel broke down yet further barriers to biological exchange, adding new creatures to the roster of alien intruders and accelerating the dispersal of old and new migratory species alike.

The advent of iron ships toward the end of the nineteenth century, for example, opened a new era in biological exchange involving species of the world’s harbors and estuaries. After the 1880s iron ships began to carry water as ballast. Soon special water ballast tanks became standard, and thus, for example, a ship from Yokohama, Japan, bound for Vancouver, Canada, would suck up a tankful of water and, more than likely, a few marine species from Japanese shores, cross the wide Pacific, then release its Japanese water and sea creatures in Puget Sound before taking on a Canadian cargo. During the 1930s Japanese clams hitched such a ride and upon arrival began to colonize the seabeds of Puget Sound, creating a multimillion-dollar clam fishery in British Columbia and Washington State. A jellyfish that devastated Black Sea fisheries came from the East Coast of the United States in about 1980. The zebra mussel, a Black

and Caspian Sea native, colonized the North American Great Lakes and river system from a beachhead established near Detroit in 1985 or 1986. It has cost the United States and Canada billions of dollars by blocking water intakes on city water systems, factories, and nuclear power plants.

A more recent invader of the North American Great Lakes is the fishhook flea, a crustacean that is a native of Caspian and Black Sea waters. It first appeared in Lake Ontario in 1998 and is now in all the Great Lakes and New York’s Finger Lakes, menacing sport and commercial fisheries and disrupting the lakes’ food web. The failures of Soviet agriculture and the expanded grain trade from North America during the 1970s and 1980s created a new pattern of ship traffic that quickly brought disruptive biological exchanges. Nowadays thirty-five thousand ocean-going ships and three thousand marine species are in transit at any given time, linking the world’s harbor and estuarine ecosystems as never before. The exchanges via ballast water are but a single variety of the swirl of biological exchange going on in modern times. Transport, travel, and trade take place on such a scale now and with such rapidity that a vast homogenization of the planet’s flora and fauna is under way.

Perspectives

From the Olympian height that allows a view of all life on Earth over its entire history, the last ten thousand years appear as an instantaneous homogenization of ecosystems, a new era in Earth history. Humankind has connected formerly distinct spheres of life through trade and travel, reprising in the blink of an eye what previously happened through continental drift. Some 300 to 250 million years ago the world’s continents fused to form a single supercontinent, called “Pangaea.” Creatures formerly kept apart from one another now rubbed shoulders. Large numbers of them became extinct by about 220 million years ago, perhaps in part on account of this new familiarity (although other theories exist). Reptiles inherited the Earth, spreading throughout the globe. During the last few millennia our species has once again fused the continents, and to some extent the seas, and is

probably provoking (through this and other means) the sixth great extinction spasm in the history of Earth.

From a less Olympian height, other vistas present themselves. The process of biological exchange is much influenced by the technology of transportation. The invention of ships, of ocean-going ships, of ballast tanks, of railroads and airplanes all led to changes and surges in the pattern of biological exchange. Transport technology provides one rhythm. Another rhythm is political.

Some states and societies showed great eagerness to import exotic species. Monarchs of ancient Egypt and Mesopotamia buttressed their prestige by maintaining gardens and zoos filled with exotic plants and animals. The Tang dynasty, as noted, showed a similar enthusiasm. Thomas Jefferson tried his best to establish rice and silkworms in Virginia. Later, the U.S. government employed an army of plant prospectors, who scoured the globe for potentially useful species and brought tens of thousands to the United States. During the nineteenth century Australia and New Zealand featured “acclimatization societies,” which imported species that met with their approval (usually from Britain). Nowadays the United States, Australia, New Zealand, and many other countries spend vast sums trying to prevent the importation of unwanted species, hoping to forestall biological invasions rather than foment them. Altogether, biological invasions now cost the United States more than all other natural hazards—floods, hurricanes, tornadoes, earthquakes, and so forth—combined.

Beyond the disposition that any society might have toward exotic species, the changing nature of geopolitics also affected biological exchange. Trade and travel—and presumably biological exchange—expanded in times of peace and contracted in times of war, brigandage, and piracy. Probably eras of imperial unification provided the best political environment for biological exchange, when a single power enforced a general peace. Anarchic systems of competing states probably checked biological exchange by slowing trade and travel, notwithstanding the effects of mobile armies and navies. Furthermore, imperialism also seems to have inspired, as well as eased, the process of collection: botanical gardens and the like.

Kew Gardens outside of London proved a crucial link in transferring rubber seeds from Brazil to Malaya at the end of the nineteenth century, starting a new plantation economy in southeast Asia. The swings between moments of consolidated imperialism and anarchic struggle established another rhythm governing the history of biological exchange. This rhythm, of course, was influenced in turn by biological exchanges, as in the case of horses on the African savanna.

One can only postulate such patterns in the history of biological exchange. Demonstrating their validity would require quantitative evidence beyond what one can reasonably hope to find. Yet, one may be sure that time and again during the past ten millennia biological exchange has altered history. The next ten millennia will be quite different: Fewer exchanges of existing species will take place because so many already have. However, newly engineered species will occasionally depart from their creators’ scripts, fashioning unpredictable biological dramas. Some of these surely will help shape the future.

J. R. McNeill

See also *Columbian Exchange; Diseases—Overview*

Further Reading

- Burney, D. (1996). Historical perspectives on human-assisted biological invasions. *Evolutionary Anthropology*, 4, 216–221.
- Carlton, J. H. (1996). Marine bioinvasions: The alteration of marine ecosystems by nonindigenous species. *Oceanography*, 9, 36–43.
- Carney, J. (2001). *Black rice: The African origins of rice cultivation in the Americas*. Cambridge, MA: Harvard University Press.
- Cox, G. W. (1999). *Alien species in North America and Hawaii*. Washington, DC: Island Press.
- Crosby, A. (1972). *The Columbian Exchange: Biological and cultural consequences of 1492*. Westport, CT: Greenwood Press.
- Crosby, A. (1986). *Ecological imperialism: The biological expansion of Europe, 900–1900*. New York: Cambridge University Press.
- Curtin, P. (1993). Disease exchange across the tropical Atlantic. *History and Philosophy of the Life Sciences*, 15, 169–196.
- Dodson, J. (Ed.). (1992). *The naive lands: Prehistory and environmental change in Australia and the southwest Pacific*. Melbourne, Australia: Longman Cheshire.
- Groves, R. H., & Burdon, J. J. (1986). *Ecology of biological invasions*. Cambridge, UK: Cambridge University Press.
- McNeill, W. H. (1976). *Plagues and peoples*. Garden City, NJ: Anchor Press.

Mooney, H. A., & Hobbs, R. J. (Eds.). (2000). *Invasive species in a changing world*. Washington, DC: Island Press.

Watson, A. (1983). *Agricultural innovation in the early Islamic world: The diffusion of crops and farming techniques*. Cambridge, UK: Cambridge University Press.

Black Death

See Diseases, Animal; Disease—Overview

Bolívar, Simón

(1783–1830)

SOUTH AMERICAN LIBERATOR

Simón Bolívar, the future Liberator of South America, was born to an aristocratic Creole family with extensive property surrounding Caracas in 1783. Although his parents had dramatic personalities (his father was a notorious womanizer and his mother managed the family estates aggressively), Bolívar was orphaned at a young age and the person who had the greatest impact on him as a child was a slave woman named Hipólita, by whom he was raised in his uncle's house and for whom he retained fond feelings throughout his life. He was a handsome, active boy, doted upon by his sisters and other female relatives. Young Simón was not a diligent student; he preferred an athletic life in the wild outdoors to time spent in a library with his tutors. Nevertheless, he was clever and received the best education that his family's wealth could provide and his disinclination to study would allow.

Bolívar's most influential teacher was Simón Rodríguez, an unorthodox freethinker who later became famous for his translation of Chateaubriand's *Atala* and for teaching anatomy to his students in the nude. In 1799, Rodríguez took his impressionable young charge to Europe for the typical gentleman's grand tour to complete his education. In Madrid, he was invited to play badminton with the future King Ferdinand VII; recalling

the accident in which he accidentally knocked off his opponent's hat, Bolívar later mused, "who would have prophesied . . . that this was a sign that one day I might tear the costliest jewel from his crown?" (Worcester 1977, 8). Teacher and student moved on to Paris where they spent much time in the salon of the infamous Fanny du Villars. It was the early Napoleonic era and when Bolívar and Rodríguez met with naturalists Alexander von Humboldt and Aimé Bonpland, they spent much time discussing the destinies of great men and the revolutions they make. In 1805, at Monte Sacro in Rome, Bolívar took a symbolic oath that he would liberate his countrymen from the Spanish yoke.

In 1806, Bolívar returned to Venezuela via the United States. He traveled with his new wife, a beautiful young Spanish girl named María Teresa Rodríguez del Toro. By all accounts he was devoted to her and was devastated when she died of typhus shortly after her arrival in Caracas. Although he had many subsequent relationships with women, Bolívar never married again and left no children. Instead, he turned his attention to local politics and accepted a position as the lieutenant chief justice of the Yare Valley. In 1810, when a constitutional crisis opened the possibility for Spanish-American *cabildos* (town councils) to seize temporary powers to rule in the king's name, Bolívar sensed that his historical moment had arrived. He went to London as a member of the three-person delegation hoping to secure British military protection for the Caracas junta and perhaps some sort of political recognition as well. Those goals may have proved too optimistic, but the brief time Bolívar spent in London initiated a devotion to British-style aristocratic reformism and constitutional monarchy that lasted for the rest of his life.

Bolívar was twenty-seven years old when he returned to Caracas in September 1810. He was a charismatic figure whose intellectual training and vast fortune ensured that his voice would be heard in the deliberations over the momentous decisions facing his country. In the beginning, Bolívar was willing to serve as a commander under the more experienced General Francisco

de Miranda when the inevitable Spanish royalist counterattack began; by 1812, however, Bolívar had started to doubt the older man's competence. In a highly controversial episode, Bolívar's garrison surrendered to the royalist Monteverde's forces and Miranda was taken captive. Bolívar's detractors see this a betrayal of both the Republic and a personal betrayal; Bolívar himself saw it as a patriotic act that saved his countrymen further bloodshed from Miranda's disastrous leadership. With the First Venezuelan Republic (1811–1812) in ruins, Bolívar and the rest of the patriotic leadership fled to exile in New Granada and islands in the British Caribbean with rulers sympathetic to his cause.

In 1812, Bolívar wrote his first significant political treatise, the Cartagena Manifesto. In 1813, he declared "war to the death" against the Spanish presence in South America, wholly dedicating his life and energies to the cause; he declared the Second Republic and took the title of *Libertador* (Liberator) for himself. What followed was a decade-long brutal civil war that pitted members of important families, including his own, against each other. In 1816, Bolívar wrote another famous tract, known as the Jamaica Letter, while he was trying to gather men and material for an expedition to Venezuela. He sailed past Haiti, where he received further assistance from mulatto leader Alexander Pétion in exchange for a promise to abolish slavery in the future Venezuelan republic. Bolívar's multinational forces eventually included a large group of British soldiers, known as the Irish and British Legions, and a homegrown band of fierce plainsmen known as the *llaneros* under the command of José Antonio Páez.

Bolívar's forces invaded the mainland in 1817 and made slow but steady advances. By 1819, they had secured a large part of the Orinoco delta and had set up a patriot headquarters at Angostura. Under Bolívar's watchful gaze, his partisans called a congress to declare the Third Republic, write a constitution, and declare the Liberator to be the first president. The Angostura constitution provided for separation of powers and many other liberal measures influenced by the United States,

Extract from Simón Bolívar's "War to the Death" Declaration in 1813

Venezuelans: An army of your brothers, sent by the Sovereign Congress of New Granada [present-day Colombia], has come to liberate you. Having expelled the oppressors from the provinces of Mérida and Trujillo, it is now among you. We are sent to destroy the Spaniards, to protect the Americans, and to reestablish the republican governments that once formed the Confederation of Venezuela. The states defended by our arms are again governed by their former constitutions and tribunals, in full enjoyment of their liberty and independence, for our mission is designed only to break the chains of servitude which still shackle some of our towns, and not to impose laws or exercise acts of dominion to which the rules of war might entitle us.

Source: Lecuna, V. (Comp.) & Bierck, H. A. Jr., (Ed.). (1951). *Simon Bolívar. Selected Writings, 1810–1830* (p. 25) (L. Bertrand, Trans.). New York: Colonial Press.

Britain, the Cádiz Constitution of 1812, and the Greek and Roman classical heritage. Now confirmed as a legitimate head of state, Bolívar pressed onward to two decisive victories over the royalists at Boyacá (1820) and Carabobo (1821). Shortly thereafter, the independence of northern South America was guaranteed in a formal capitulation and the Congress of Cúcuta created the Republic of Gran Colombia. Always restless, Bolívar could not bring himself to stay in one place and govern while Spanish forces remained on the continent; he left Gran Colombia in the care of his vice president, Francisco de Paula Santander, and headed westward to join in the liberation of Peru. After their fateful meeting at Guayaquil in 1822, Bolívar's only hemispheric rival, Argentine general José de San Martín, went into self-imposed exile and the Liberator emerged as the towering hero of the continental independence movement. By 1826, the last remaining royal strongholds fell and the grateful former Peruvian province adopted a new name, Bolivia, in honor of its liberator.

Judgment comes from experience, and experience comes from bad judgment. • SIMÓN BOLÍVAR
(1783–1830)

Simón Bolívar had accomplished his life's goal. He enjoyed unimaginable popularity as the Liberator of a continent, but the territories quickly proved ungovernable. Racial tensions worsened when the patriots did not emancipate the slaves immediately as they had promised. Regional jealousies quickly surfaced and there was growing hostility between those who favored a decentralized federal system and those like Bolívar who increasingly wanted a strong centralized authority to deal with the unrest. His enemies quickly depicted him as a closet monarchist, intent on securing an American crown for himself. In the late 1820s, he survived a series of assassination attempts, one time by jumping out of a window while his would-be murderers were at the door.

He grew increasingly pessimistic and planned to leave for England. Before he could depart, however, an exhausted Bolívar succumbed to tuberculosis in December 1830. His legacy is vast. Not only did Bolívar inspire the independence movements of northern South America and use his considerable military skills to defeat the Spanish forces throughout the region, he conceived of a continental system that was the forerunner of modern Pan-Americanism. He has achieved iconic status throughout the Americas, and has lent his name to two South American republics (Bolivia and the Bolivarian Republic of Venezuela) and one national currency.

Karen Racine

See also Warfare—Post-Columbian Latin American

Further Reading

- Brading, D. (1991). *The first America: The Spanish monarchy, Creole patriots and the liberal state 1492–1867*. Cambridge, UK: Cambridge University Press.
- Bushnell, D. (2003). *Simón Bolívar: Liberation and disappointment*. New York: Longman.
- Collier, S. (1983). Nationality, nationalism and supranationalism in the writings of Simón Bolívar. *Hispanic American Historical Review*, 63(1), 37–64.
- Cussen, A. (1992). *Bello and Bolívar: Poetry and politics in the Spanish American revolution*. Cambridge, UK: Cambridge University Press.
- Lynch, J. (1983). Bolívar and the Caudillos. *Hispanic American Historical Review*, 63(1), 3–35.

- Lynch, J. (1986). *The Spanish American revolutions 1808–1826*. New York: Norton.
- Lynch, J. (Ed.). (1994). *The Latin American revolutions: Old and new world origins*. Norman: University of Oklahoma Press.
- Madariaga, S. (1952). *Bolívar*. London: Hollis & Carter.
- Masur, G. (1969). *Simón Bolívar*. Albuquerque: University of New Mexico Press.
- Slatta, R., & De Grummond, J. L. (2003). *Simón Bolívar's quest for glory*. College Station: Texas A & M University Press.
- Worcester, D. (1977). *Bolívar*. Boston: Little, Brown.

British East India Company

The English East India Company was a British trading company, responsible for the import of Asian goods, expanding English and British interests in Asia, and conquering India. The company was dissolved in 1859 when the administration of India passed to the British government.

The English East India Company was created as a stockholders' company in 1599 and granted monopoly for trade with East India in 1600 by Queen Elizabeth. The British initiative followed the successes of the Dutch East India Company and Portuguese traders that imported Asian goods by sailing around the horn of Africa, surpassing the traditional caravans. The seventeenth century was marked by intense competition and frequent battles between the European companies.

Main products from Asia in the seventeenth century were pepper and spices, which demanded a high price per quantity in the home market. However, a successful voyage demanded planning, strong support, and patience as it took about two years to be completed. Dangers faced by the traders included storms, tricky waters, pirates (especially European competitors), and diseases, which combined to regular losses of sailors and ships. Consequently, state backing and shareholders who could afford to wait for returns on their investments were essential, while the final rewards were significant.

From the 1640s cotton and silk cloth became impor-

One Englishman's Opinion

The following poem by a British colonial official summarizes the positives and negatives of life in India.

What varied opinions we constantly hear,
Of our rich, Oriental possessions;
What a jumble of notions, distorted and queer,
Form an Englishman's "Indian impressions"!

First a sun, fierce and glaring, that scorches and
bakes;

Palankeens, perspiration, and worry;
Mosquitoes, thugs, cocoanuts, Brahmins, and
snakes,

With elephants, tigers and curry.

Then Juggernat, punkahs, tanks, buffaloes, forts,
With bangles, mosques, nautches, and dhingees;
A mixture of temples, Mahometans, ghats,
With scorpions, Hindoos, and Feringhees.

Then jungles, fakeers, dancing-girls, prickly heat,
Shawls idols, durbars, brandy-pawny;
Rupees, clever jugglers, dust-storms, slipper'd feet,
Rainy season, and mulligatawny.

Hot winds, holy monkeys, tall minarets, rice
With crocodiles, ryots, or farmers;
Himalayas, fat baboos, with paunches and pice,
So airily clad in pyjamas.

With Rajahs—But stop, I must really desist,
And let each one enjoy his opinions,
Whilst I show in what style Anglo-Indians exist
In Her Majesty's Eastern dominions.

Source: Atkinson, G. F. (1854). *Curry and rice on forty plates or the ingredients of social life at "our station" in India*. London: Day & Son.

tant trade objects. Most cloth was from India, though calico patterns, popular in Europe for their aesthetic and exotic quality, were actually patterns adjusted to European taste. By 1700 the English East India Company clearly controlled the European market for Indian cloth, with annual imports approaching one million pieces of cloth. The imports led the English textile industry to protest against foreign competition and a law was enacted allowing only raw silk imports, rather than silk cloth, to secure work for English silk weavers. The law had little effect on the company, as much of its market was in continental Europe, unaffected by the English law.

During the seventeenth century trading activities were based from relatively small trading stations, or factories, such as Bantam in Java and Madras in India. These provided a steady settlement in which expatriate employees could worship freely, e.g., as Christians, and rule by their own laws in agreement with the local rulers. A noticeable exception was China, which, except for the Portuguese in Macao, did not allow foreigners a permanent base, demanding all trade to be conducted through Chinese middlemen responsible for adherence to Chinese rules.

From around 1750 the (now British) East India Company increasingly participated in Indian politics, leading

to its conquest of India. It is debated whether conquest was intended from the start, or if it was the unintended consequence of interfering in Indian politics in favor of regional stability for the sake of company trade, but once conquest started, the company rapidly gained control over parts of India as the ruling Mughal empire weakened. Most company expansion resulted from local authority being threatened by the Marathas, a major people from the west coast of India whose main families joined in the Maratha confederacy in the eighteenth century, aiming to expand Maratha power at the expense of the weakened Mughals. The company offered armed aid and as reward received land, titles, and influence. Consequently, the company gained control and authority as local rulers became increasingly dependent on it. This process continued until its culmination in 1818, when most of India was under direct or indirect company control. This is a prime example of "reluctant empire," imperial expansion run by private companies, not government policies.

The company ruled India as a military state, organizing a rigid interpretation of Indian traditions and caste, creating an inflexible social system. Apart from trade, a process of attempted Anglicizing began with an influx of Christian missionaries and English values. Among the



customs attacked was suttee, the burning of widows; however, the British attempt associated suttee with the higher classes, and thus it became desirable to the lower classes. Other attempts to strengthen the position of women against “barbaric” traditions had similar effects.

Economically, the industrial revolution in Britain ruined the Indian textile industry in the 1820s and made the company focus on new areas of trade, chiefly opium sold to China. This led to the Opium Wars from 1839–1842 and 1856–1860, which forced China to open up to unfettered British trade. However, opium did not cover the total of the British imports from China, and to cover the deficit silver from India was used to balance the trade. During the same period, the British parliament abolished the company’s monopolies on trade to India (1813) and China (1833).

In 1857, millions of Indians rose in revolt in the Great Mutiny. As a consequence, the British parliament decided to take over the government of India from the company in 1859, ending the East India Company’s period as rulers of an empire and leading to its complete abolishment.

Martha A. Ebbesen

See also British Empire

Further Reading

- Chaudhuri, K. N. (1978). *The trading world of Asia and the English East India Company, 1660–1760*. Cambridge, UK: Cambridge University Press.
- Lawson, P. (1993). *The East India Company: A history*. London: Longman.
- Marshall, P. J. (1998). The English in Asia to 1700. In N. Canny (Ed.), *The Oxford history of the British empire: The origins of empire* (pp. 264–285). Oxford, UK: Oxford University Press.
- Marshall, P. J. (1998). The British in Asia: Trade to dominion, 1700–1765. In P. J. Marshall (Ed.), *The Oxford history of the British empire: The eighteenth century* (pp. 487–507). Oxford, UK: Oxford University Press.
- Ray, R. K. (1998). Indian society and the establishment of British supremacy, 1765–1818. In P. J. Marshall (Ed.), *The Oxford history of the British empire: The eighteenth century* (pp. 508–529). Oxford, UK: Oxford University Press.
- Washbrook, D. A. (1999). India, 1818–1860: The two faces of colonialism. In A. Porter (Ed.), *The Oxford history of the British empire: The nineteenth century* (pp. 395–421). Oxford, UK: Oxford University Press.

British Empire

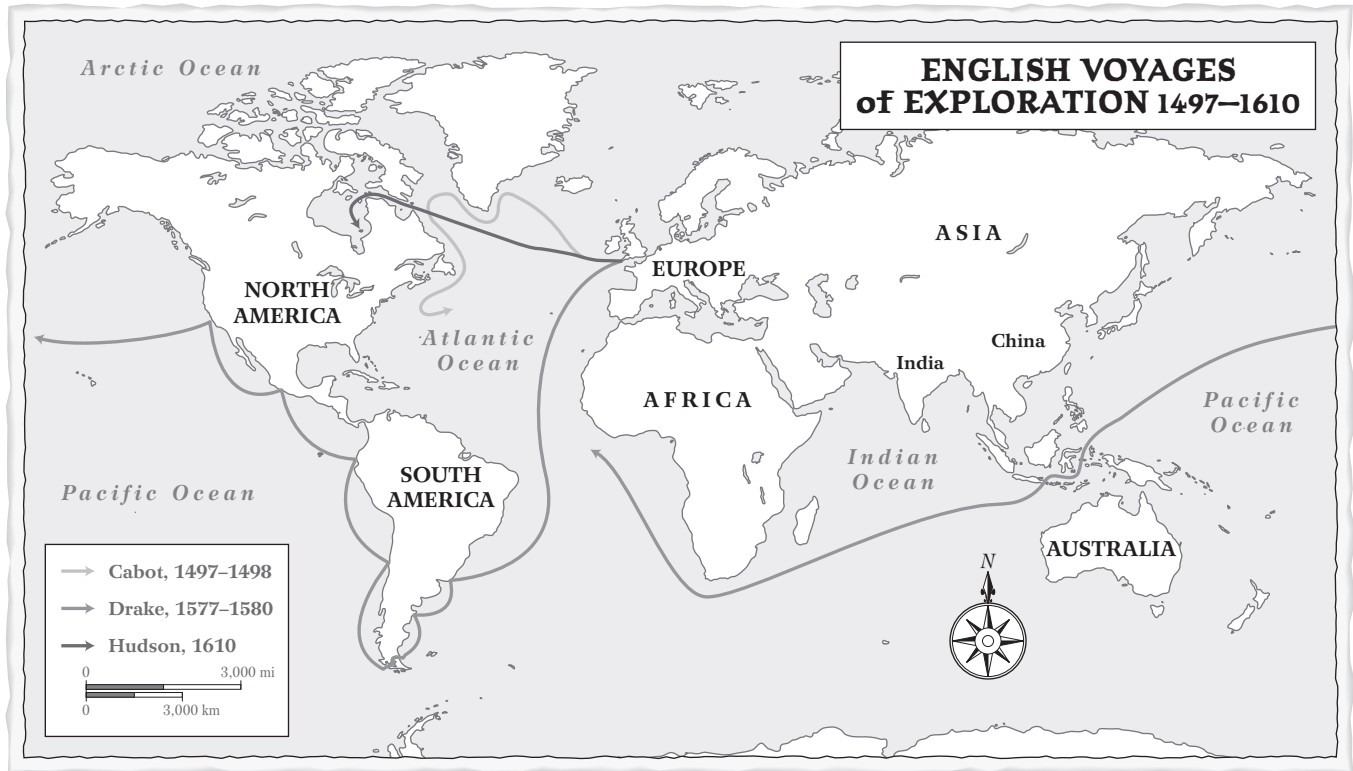
Great Britain, because of the Industrial Revolution, at one time had an unprecedented amount of power over the rest of the world. At least five British empires rose and fell between the early seventeenth century and the beginning of the last one-third of the twentieth century. These empires were in different parts of the world and were run on different principles. The one constant was Great Britain’s disproportionate ability to project its power abroad. Although none of the five empires remains, their power is still felt in the wide extension of the English language and of the Anglo-American legal tradition around the world.

Sources of British Power

When most societies were still in the second stage of human development (farming), British society entered the third stage (urbanization, world trade, and industrial development).

No longer were the British limited to what their arable (fit for growing crops) land could produce. As in most countries, the farms and forests had provided the foodstuffs, textiles, building materials, means of transport (in the form of horses and their fodder), and burnable fuel. To an ever greater degree as the eighteenth century progressed, however, the British could meet each of these basic economic needs through massive imports—and in the case of building materials, transport needs, and fuel, major parts of the needs could be met through mining, without taking up any arable land in Great Britain or abroad.

With most of the world still in the farming stage, Great Britain’s ability to free much of its labor force from the land and shift it into trade and manufacturing allowed for the projection of British power to the ends of the Earth. By 1800 the British navy ruled the waves. No other society had ever been so powerful; no other society had entered the third stage of human development in a world still characterized by societies still in the second stage. The profits and raw materials that poured into the British Isles



because of Great Britain's unique place in international trade accelerated the modernization of the domestic marketplace; this modernization in turn further magnified British power.

The First Three British Empires

Great Britain's first empire flourished during the seventeenth and eighteenth centuries. The East India Company was chartered and given its Royal Charter and its monopoly on trade with India in 1600. Settlement colonies were not far behind in North America, with the Jamestown settlement in Virginia in 1607 and Massachusetts Bay in 1620. Through the Committee on Trade and Plantations (a committee of the Privy Council), the British government tried to maintain a policy of mercantilism, buying only raw material from the colonies and allowing them to buy their finished goods solely from the mother country. This arrangement was designed to maintain the flow of precious metals into Great Britain. Indeed, some evidence indicates that the captive market for British manufactures that was the eastern seaboard of North America may have helped to give the British economy its push into full modernization.

Meanwhile, France's rivaling imperial tradition was destroyed in the Seven Years' War (1756–1763, called in the United States the "French and Indian War"), which was fought largely over trading opportunities. The British victory stripped the French of their North American colonies and their position in India. The French revenge was to bankroll the American Revolution against the British (1775–1781), a war fought over the tax and mercantile policies that were stifling colonial development. (French support for America's successful revolution, in turn, helped bankrupt the French state and prepared the way for the French Revolution that began in 1789.)

With the loss of the American colonies and the step-by-step expansion of British military and political control in India, British imperial attention turned to India itself and the slave-worked sugar plantations of the Caribbean. Thus began the second British empire, which lasted from the 1780s to the 1830s. It coincided with the beginnings of the Evangelical Movement—the development of a more personally committed, morally stringent form of Protestantism than the Anglican Church of the eighteenth century had been providing for its adherents—and the rise of mass middle-class political involvement within Great Britain. Many people, having it better than

Expansion and Contraction of European Empires

15 TH CENTURY	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus “discovers” the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16 TH CENTURY	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is “discovered” by Vasco Nuñez de Balboa of Spain.
	Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
17 TH CENTURY	France establishes a presence in West Africa.
	Portugal’s dominance in East Africa and Asia begins to decline.
	The English, Dutch, and French charter trading companies.
	The English settle Jamestown in Virginia.
18 TH CENTURY	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
	France loses American colonies and territory to England and Spain.
	The English lose control of their American colony.
19 TH CENTURY	The Dutch Republic becomes a colonial power with the abolishment of its private trading companies.
	The Dutch begin to lose most of their colonies to the British.
	The Spanish empire declines.
	By the time of the Treaty of Paris in 1763, England has become the dominant European colonial power.
20 TH CENTURY	France under Napoleon regains territory in the Americas.
	Haiti gains freedom from France through a slave revolt.
	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
20 TH CENTURY	The Habsburg empire is transformed into the Austro-Hungarian empire.
	The German empire is established after the Prussian defeat of France.
	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonies in Africa.
20 TH CENTURY	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
20 TH CENTURY	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese-speaking nations.
20 TH CENTURY	The Russian-Soviet empire disintegrates.

ever before, looked around them and found to their shock that many other people were being ground into the dust.

The first great middle-class reform movement after the expansion of the voting franchise among the richer sectors of British society in 1832 was the abolition of slavery in the British empire in the 1830s (the original act abolishing slavery, later modified, was passed in 1833). The result of abolition was to permanently injure the economies of the sugar islands of the Caribbean—and make England a more humane nation.

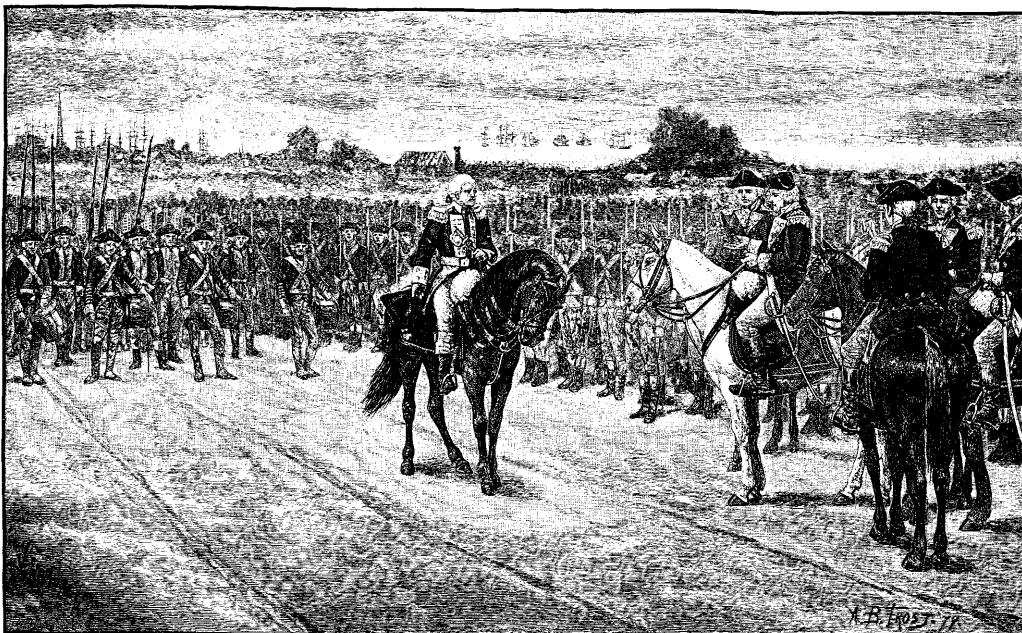
Another result was the third British empire. The Caribbean was now of only marginal concern. More centrally, mid-nineteenth-century England exported its parliamentary procedures (although usually on a more democratic franchise) to Australia, New Zealand, and southern Africa (the first two countries had been claimed from nonwhites in 1788 and 1840, respectively; southern Africa, originally Dutch, had been taken from the French emperor Napoleon as a stopover on the way to India).

Self-governing institutions were in place in most settlement colonies by the end of the 1850s. Yet, smaller outposts, and those without many European settlers, did not

have such institutions. In no two colonies were the institutions the same. Until 1859, furthermore, India was the possession of a private company that was merely under British government regulation. In short, no imperial “system” existed, merely the Colonial Office (and after 1859 the India Office), which sent out governors and reviewed local regulations or laws. Rather than any imperial system, instead a diverse imperial heritage existed.

The Fourth and Fifth British Empires

By the late nineteenth century Great Britain’s economic superiority was being lost to competition from the newly industrializing areas, chiefly continental Europe, North America, and Japan. Still, the British retained two key advantages. First was the city of London, the world’s financial center. The city was the source of England’s continuing balance-of-payments surplus (in the form of the profits on “invisible” financial dealings) long after England was running a trade deficit in tangible goods. Second was England’s head start in developing a disproportionate, superpower-scale military establishment, with a worldwide network of coaling stations and a tradition of



In what turned out to be the greatest loss for the British Empire, the British surrender to the Americans at Yorktown.

Creating Local Leaders

One feature of British rule was to create local leaders who were loyal to the British colonial agents. The following text describes the system used in Afghanistan, which has persisted into modern times after the end of British rule.

The British had imposed a uniform framework of administration in the Empire which was often insensitive to local ethnic and structural susceptibilities. Administration was based on the principle of utilizing chiefs or, where there were none, creating them. So as they curtailed the power of chiefs in Group A societies they created chiefs, even if none previously existed, in Group B societies in Africa (Fortes and Evans-Pritchard, 1970: 15–16). In the Pukhtun *nang* areas indirect rule posed problems not encountered in the *qalang* areas where a hierarchy of Khans already existed. The precepts of indirect rule presupposed ignorance of tribal *nang* structure, a point cogently made by British political officers who knew the Tribal Areas (Howell, 1931: 50). The colonial encounter with the British resulted in the creation of what is called “the Maliki system” in the Tribal Areas. Loyal and suppliant Maliks and *mashars* (petty chiefs) were officially given the title Malik and their names placed by the Political Agent on lists which entitled them to various favours and imposed certain duties. A profusion of Malik categories resulted, such as *spin giray* and *lungi*-holders. Inaccessible areas of little strategic value to the British, such as the Shilman area south of the Kabul river and in the Khyber Agency, were not given Maliks of any kind.

This system has continued until today. Official allowances such as *muajib* are often very small, starting from half a rupee to a rupee per year, but they signify political importance and open economic possibilities and are therefore social symbols of status. A Mohmand Malik described the attraction of the allowance: “I do not enjoy eating a carrot but like the sound it makes when munched.”

Source: Ahmed, A. S. (1980). *Pukhtun economy and society: Traditional structure and economic development in a tribal society*. (pp. 142). London: Routledge & Kegan Paul.

imperial and military service among the upper and middle classes.

The fourth British empire was the result of the scramble among Great Britain, France, and the newly Unified German Empire, among others, for Africa (and other tropical colonies) during the 1880s and 1890s. During the twentieth century many people assumed that Great Britain had seized these colonies in order to make money. However, modern scholarship suggests that it was never profitable to administer the interior of Africa or isolated islands in the South Pacific. Three other explanations exist for the scramble for Africa, or at least for Great Britain’s share in the scramble: (1) the desire to freeze out other European powers or to avoid being frozen out by them; (2) the recurrent instability of frontiers with less-developed, less-industrialized societies; and (3) the wish on the part of governments for cheap victories to impress the newly enfranchised common people (four-fifths of British men could vote after 1884–1885).

The fifth (and final) British empire was what was gained through League of Nations mandates during the twentieth century. The British took these mandates, such as Palestine, and yet after the Second Boer War (1899–1902), many British people doubted the justice of Great Britain’s imperial activities.

Imperial affairs after 1918 were dominated by the questions of how and when Indian independence would come (it came in 1947). The status of the white settlement colonies was also a question (namely Canada, a federation since 1867; Australia, federated in 1901; the Union of South Africa, set up as a federation under the rule of the defeated Afrikaans-speaking Boers in 1910; New Zealand, which had governed itself since the 1850s; and eventually Ireland—after the 1921 Anglo-Irish Treaty). The other powers at the Versailles Peace Conference (ending World War I) in 1919 had denied that any of these colonies were independent states (Ireland had not come into the picture then). The representatives of the colonies had to sign the Versailles Treaty not as independent powers but underneath the British signature, and with an indentation to show that they were subparts of the British empire.

Full independence and the right to maintain inter-

World capitalism has at the present time . . . reached the stage of imperialism . . . wars for the mastery of the world, for the markets, for bank capital and for the strangulation of small nations, are inevitable under such a state of affairs. • V. I. LENIN (1870–1924)

national diplomatic relations on their own were granted to the self-governing colonies by the Statute of Westminster in 1931, which created the British Commonwealth of Nations.

Under the Statute of Westminster, government by a local parliament whose prime minister effectively chooses the monarch's representative (the governor-general), a model that had originated in the mid-nineteenth century, was now formalized. Under this model the newly independent states that left the British empire during the 1950s and 1960s were organized, although many of these states would soon abandon their British-style constitutions and the institution of governor-general in favor of locally emergent presidents. These states nonetheless tended to remain members of the Commonwealth, whose head was the British monarch.

Ideologies of British Imperialism

The British nawabs (rulers) who, working for the East India Company, ruled India during the late eighteenth century maintained no pretense that they were in India for any noble purpose or that they had any cultural superiority to the Indians. The nawabs were there to make money, and on those frank terms they mixed equally in the wealthier reaches of Indian society. Many cross-cultural marriages and affairs occurred.

After the Evangelical Movement in the first one-third of the nineteenth century had accustomed the British to asking themselves the moral groundings of their actions—and after the violent suppression of the Indian “Mutiny” of 1857–1858—people developed the idea of a British mission to bring order and economic progress to peoples who, it was now assumed, would kill each other without the pacifying hand of British oppression. The British rulers stopped mixing with the Indian ruled and developed a self-image of stoicism and suffering.

In Great Britain itself the spread of literacy and education during the mid-nineteenth century led many people to ask why their country was in front of the world in so many ways. That Great Britain was in front of the world was plain to see from the halls of the Great Exhi-

bition (1851): Half the products on show were from one island off the northwest coast of Europe, and half were from the rest of the world, combined—and this was a fair sampling of who was producing what.

The English philosopher John Stuart Mill (*On Liberty*, 1859) and others looked to the economic effects of English political freedom. After publication of the English naturalist Charles Darwin's *The Origin of Species* (1859), however, many writers began to work out ideas of racial or biological superiority. Later generations simply took British power and racial superiority for granted. The statesman Winston Churchill, for example, stayed loyal throughout his life to his sentimental attachment to the Empire that had painted all the schoolroom maps “British Empire Red.” As he wrote his associate Anthony Eden in 1944, “hands off the British empire is our maxim and it must not be weakened or smirched to please sob-stuff merchants at home or foreigners of any hue” (Cain & Hopkins 2002, 628).

However, that is what a later prime minister did. Harold Macmillan, in his “Winds of Change” speech in South Africa in 1960, proclaimed the coming of African independence—which had actually become inevitable with Great Britain's U.S.-mandated withdrawal from Suez in Egypt in 1956. In an egalitarian (relating to human equality) age, Great Britain found itself the junior partner of the new superpower, the United States, which was against British imperialism. Plus, for some time after World War II Great Britain was financially strapped. For both reasons, the British empire could not be maintained. Most of the colonies were given their independence by 1970. Except for the Falkland Islands and a few other outposts (the largest in population, at sixty-five thousand, is Bermuda, a colony since 1609), the empire of the world's first industrial country has ceased to be—except in its cultural influence in a world dominated by the English-speaking powers and the English language itself.

Empire of the English Language

After 1492, when newcomers from the Old World found themselves in the New World among natives who had

**Nassau, capital of
the Bahamas, a
British colony in
the late 1800s.**



not been exposed to the diseases of the Old World of Afroeurasia—Africa, Eurasia, and their environs—the natives tended to die in large numbers, often with the active help of the newcomers (as in the case of the cholera-infested blankets given to the native North Americans during the eighteenth century and the random shootings of Australian aborigines during the nineteenth). The population of the New World was reduced by 90 percent during the thirty years after 1492 and by 50 percent in the remainder of the population during the ninety years after that. During the nineteenth century the population of Tasmania disappeared completely.

Thus, ample room for British settlers seemed to exist. They included poor people looking for a better life, but they also included involuntary settlers, people whose sentences of death were commuted to transportation (a practice abolished in 1868). Room also existed for carefully selected poor families, who were offered subsidized fares in order to create socially balanced colonies and to remove the poor from Great Britain itself. This form of social engineering was most strongly advocated in the writings of the English colonialist Edward Gibbon Wakefield, starting with *A Letter from Sydney* (1829). Settlers cheated the natives out of their land and fought battles with them when cheating would not work (as in New Zealand in the period stretching from the Treaty of Waitangi in 1840 through the Maori Wars of the 1860s). In Australia, cheating the natives with unequal or broken treaties on the New Zealand (or North American) model was not necessary, for the Australian settlers denied that

the natives had the cultural or human worth to own land at all; land was simply taken without formality or fuss.

Until the abolition of the slave trade in the British empire in 1807, slaves were dispatched around the world at British command. During the nineteenth century Chinese “coolies” and Indian peasants were similarly dispatched. These slaves and peasant workers contributed to the repopulation of much of the world by peoples of Afro-Eurasian stock. This result is visible in today’s United States, Canada, Australia, New Zealand, Fiji, and the Caribbean.

The importance of these countries, seen together with the British-influenced countries of South Asia and Africa and with the continuing importance of the United Kingdom and the Republic of Ireland, has led to the domination of the English language in world trade, mass media, and science, at least since the beginning of the twentieth century, when English eclipsed French in diplomacy.

Indeed, the place of many of the larger English-speaking countries in the world today, from the United States to the United Kingdom to India, is further magnified by their high levels of domestic tolerance, personal freedom, and social experimentation, all of which were extended from industrial Great Britain, and all of which allow for the maintenance of successful capitalist systems or mixed economies.

On the other hand, the African interior, which had already been weakened by centuries of slave-trading, was deliberately subordinated to the Western economic system in the early and middle twentieth century—through

the imposition of taxes that could be paid in British currency and earned in British-controlled factories and plantations. Meanwhile the plantation economies of the British Caribbean, of much of Africa itself, and of many Pacific islands, were trapped in a boom-and-bust cycle that prevents a society from moving beyond poverty. This cycle characterizes those societies that function economically as the specialized exporters of raw commodities rather than of manufactured goods. Many societies are overly specialized in this way largely because of the activities of the traders and planners of the period of British overlordship.

Edward Beasley

See also Africa, Colonial; British East India Company; Churchill, Winston; Decolonization; Elizabeth I; Expansion, European; Fur Trade; Grand Tour; Hudson's Bay Company; Locke, John; Missionaries; Orientalism; Shaka Zulu; Victoria; Warfare—Europe; World War I; World War II

Further Reading

- Andrews, K. R. (1984). *Trade, plunder, and settlement: Maritime enterprise and the genesis of the British empire, 1480–1630*. Cambridge, UK: Cambridge University Press.
- Cain, P. J., & Hopkins, A. G. (2002). *British imperialism, 1688–2000* (2nd ed.). Harlow, UK: Longman.
- Colley, L. (2002). *Captives: The story of Britain's pursuit of empire and how its soldiers and civilians were held captive by the dream of global supremacy, 1600–1850*. New York: Pantheon.
- Edney, M. H. (1997). *Mapping an empire: The geographical construction of British India, 1765–1843*. Chicago: University of Chicago Press.
- Eldridge, C. C. (Ed.). (1984). *British imperialism in the nineteenth century*. London: Macmillan.
- Fieldhouse, D. K. (1984). *Economics and empire, 1830–1914*. London: Macmillan.
- Galbraith, J. S. (1963). *Reluctant empire: British policy on the south African frontier, 1834–1854*. Berkeley and Los Angeles: University of California Press.
- Grove, R. H. (1995). *Green imperialism: Colonial expansion, tropical island Edens, and the origin of environmentalism, 1600–1860*. Cambridge, UK: Cambridge University Press.
- Headrick, D. R. (1981). *The tools of empire: Technology and European imperialism in the nineteenth century*. New York: Oxford University Press.
- Hutchins, F. G. (1967). *The illusion of permanence: British imperialism in India*. Princeton, NJ: Princeton University Press.
- Louis, W. R. (Ed.). (1999). *The Oxford history of the British empire*. New York: Oxford University Press.
- Mackenzie, J. M. (1995). *Orientalism: History, theory, and the arts*. New York: Manchester University Press.
- Mansergh, N. (1982). *The commonwealth experience* (Rev. ed.). Toronto, Canada: University of Toronto Press.
- Melman, B. (1992). *Women's orients: English women and the Middle East, 1718–1918*. Ann Arbor: University of Michigan Press.
- Packenham, T. (1991). *The scramble for Africa: White man's conquest of the dark continent from 1876 to 1912*. New York: Avon.
- Perry, J. H. (1971). *Trade and dominion: The European overseas empires in the eighteenth century*. New York: Praeger.
- Porter, A. N. (Ed.). (1991). *Atlas of British overseas expansion*. London: Routledge.
- Porter, B. (1984). *The lion's share: A short history of British imperialism, 1850–1983* (2nd ed.). Harlow, UK: Longman.
- Semmel, B. (1993). *The liberal idea and the demons of empire: Theories of imperialism from Adam Smith to Lenin*. Baltimore: Johns Hopkins University Press.
- Thornton, A. P. (1985). *The imperial idea and its enemies: A study in British power* (2nd ed.). New York: St. Martin's Press.
- Walvin, J. (1992). *Slaves and slavery: The British colonial experience*. Manchester, UK: Manchester University Press.
- Wrigley, E. A. (1988). *Continuity, chance, and change: The character of the Industrial Revolution in England*. Cambridge, UK: Cambridge University Press.

Buddha

See also Siddhartha Gautama

Buddhism

Buddhism is the world's fourth-largest religion after Christianity, Islam, and Hinduism. Buddhism is approximately twenty-five hundred years old and has influenced cultures, events, and thought for generations. It is devoted to the improvement and eventual enlightenment of people, primarily through their own efforts.

The Indian philosopher Siddhartha Gautama founded Buddhism. The traditional dates of his life are 566 to 486 BCE, although recent studies suggest that Gautama was born as much as a century later. Gautama became known as “the Buddha” (the Enlightened One) after achieving enlightenment. He was born a prince of the Sakya clan in a small Indian kingdom in what is now Nepal. He had every luxury of the day and on the surface an apparently



satisfying life. He married, had a son, and was destined to inherit his father's kingdom. However, at the age of twenty-nine he became dissatisfied with his life of ease after being exposed to the true lot of humankind: suffering, old age, disease, and death. His father had protected him from these things because of a prophecy that Siddhartha would become either a great king or a great spiritual leader. His father's hopes for a powerful successor were dashed when Siddhartha walked away from this life of ease and became an ascetic, a wandering holy man.

For six years he studied and learned from various gurus and holy men while depriving himself of all but the most meager nourishment. Siddhartha discovered that the extremes of self-deprivation were no better than the extremes of luxury and self-indulgence, so he sought the "Middle Way," another name for Buddhism. Gautama found enlightenment while meditating under a bodhi tree. The Buddha achieved nirvana—the extinction of all desire and ignorance—and proceeded to teach others how to achieve the same state for the next forty-five years. Through discussions, parables, teaching, and living, the Buddha taught the "path of truth or righteousness" (Dhammapadam). The scripture (*sutta*), "The Foundation of the Kingdom of Righteousness," contains a succinct exposition of the major points that the Buddha taught.

Basic Beliefs

The Buddha preached "the Four Noble Truths" that define the existence of humankind: (1) Life is sorrow or suffering, (2) this suffering is caused by our selfish craving and desires, (3) we can remove sorrow by removing our desires, and (4) the removal of our desires is achieved by following the Noble Eightfold Path. The Noble Eightfold Path defines the "correct" behavior as right conduct, right effort, right speech, right views, right purpose or aspiration, right livelihood, right mindfulness, and right contemplation or meditation. The Buddha had few prohibitions but listed "five precepts" that good Buddhists should generally adhere to: not to kill, not to steal, not to lie, not to imbibe intoxicants, and not to be unchaste or unfaithful.

The Buddha taught that *skandas* (experiential data)

When and Where World Religions Began

4000–2500 BCE	Hinduism	South Asia
1300–1200 BCE	Judaism	West Asia
500–400 BCE	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400–221 BCE	Daoism	China
1st Century CE	Christianity	West Asia, Europe
3rd Century CE	Manichaeism	West Asia
6th Century CE	Shinto	Japan
7th Century CE	Islam	West Asia
11th Century	Orthodoxy	West Asia
15th–16th Century	Sikhism	South Asia
16th Century	Protestantism	Europe
19th Century	Latter-day Saints	North America
	Babi and Baha'i	West Asia
19th–20th Century	Pentecostalism	North America

create our existence from moment to moment and that only karma (the law of cause and effect) operates through our experience and is never lost. However, everything is changeable and impermanent. The Buddha made few concrete statements about the afterlife or the nature of "god"—realizing that the Middle Way can be taught but that each person must experience dharma—the realization of nirvana. His final admonition to his followers was to "work out your salvation with diligence" (Buddhist suttas 2000, 114).

After the Buddha—Growth in India

The Buddha was a practical teacher who knew that people need instruction, and he established the *sangha* (community of Buddhist monks and nuns) to carry on his work and the work of their own salvation. The Buddha



A Buddhist cemetery in Kyoto, Japan, in the later 1880s.

instructed the *sangha* that it could change or delete any of the lesser rules after his passing if the *sangha* saw fit. Ultimately, the Buddha urged his followers to be “a lamp unto themselves.” Buddhism provides a system that demonstrates where we err and how to correct our errors not by miracles but rather by hard work and contemplation.

One of the most noted people who helped to expand Buddhism was the Mauryan ruler Asoka, who ruled from 272 to 231 BCE. The Maurya empire (c. 324–200 BCE) grew from the state of Magadha after the time of the Buddha and rapidly expanded after King Alexander the Great of Macedon invaded India in the 320s BCE, creating the first really unified kingdom in India. Asoka became a convert to Buddhism and helped to expand it by providing for missionaries and monks, so that Buddhism became a world religion while Hinduism remained confined to India. He is often compared with Roman Emperor Constantine in the West, whose conversion to Christianity in 312 CE helped that religion to grow. Inscriptions on pillars and rocks throughout Asoka’s realm encouraged the citizens of the empire to follow the dharma, limit the killing and cruelty to animals, and live a righteous life. Like Christianity, Buddhism may also have provided Asoka and the Mauryans

with a code of conduct and a way to help manage, enlarge, and consolidate the empire. Buddhism also benefited from the patronage of a king who helped it to reach beyond the borders of India.

Theravada, Mahayana, and Vajrayana Sects

The *Maha-Parinibbana Sutta* (Book of the Great Decease) concerns the final days and death of the Buddha and is important because the Buddha did not consider himself to be a deity. It illustrates the relationship between the Buddha and Ananda, a cousin of the Buddha who was a disciple and his personal servant. A warm, trusting relationship between the two shines through the text. The first Council of Buddhism met to organize and retain the teachings of the Buddha several months after his death. *The Buddhist Suttas*, probably recorded by the first or second century BCE, is the canon of the Buddhist faith.

However, by the second and first centuries BCE Buddhism had already begun to diverge into schools of thought that evolved into the major sects of Theravada, Mahayana, and Vajrayana. The Theravada claimed to adhere closely to the original teachings of the Buddha and evolved along more monastic lines to spread through

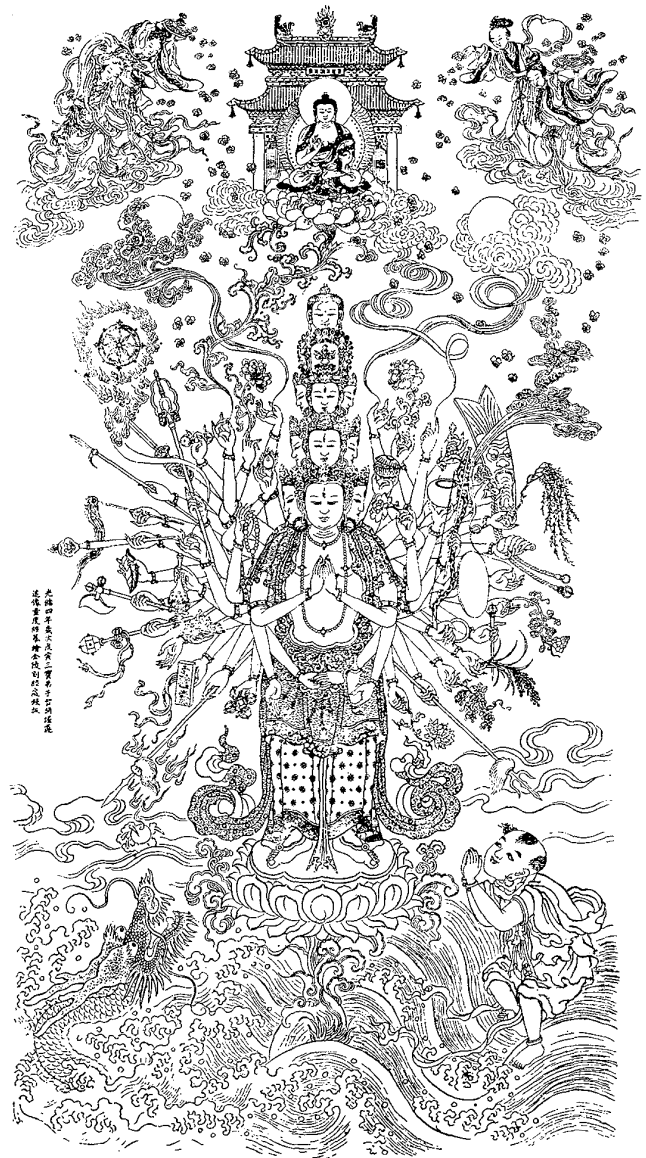
southeast Asia to Sri Lanka, Myanmar (Burma), Thailand, and Cambodia. Theravada is also known as “Hinayana,” which means “lesser vehicle.” Mahayana (greater vehicle) Buddhism became the more adaptive Buddhism. With an emphasis on compassion and flexibility, it meshed with the cultures it encountered to spread to China, Korea, Japan, and Vietnam. Mahayanists also developed the idea of the bodhisattva (a being who compassionately refrains from entering nirvana in order to save others and is worshipped as a deity). Vajrayana (diamond vehicle) Buddhism is also known as “tantric Buddhism” and spread to central Asia, primarily Tibet.

The Silk Road and the Spread of Buddhism in Asia

The Silk Road was a network of trade routes from China to the Mediterranean and to India from about the second century CE to approximately the fifteenth century, connecting the world in ways it had not been connected before. Religions in particular found their way to new lands and different cultures via the Silk Road. Buddhism originated in India and spread to the Kushan areas, part of what is today Pakistan and Afghanistan, by the first century CE. Buddhism developed a number of sects, built many monasteries, and became a consumer of many of the luxuries of the day, especially silk. Buddhist monasteries often provided solace for weary travelers, and Buddhist monks, nuns, and their devotees acquired massive quantities of silk for ceremonial functions. A symbiotic relationship existed whereby the growth of Buddhist monasteries increased demand for silk while also supporting its trade and movement.

The earliest schools of Buddhism to spread along the Silk Road were the Mahasanghikas, Dharmaguptakas, and Sarvastivadins, eventually to be subsumed by the Mahayana sect. As Buddhism spread to central Asia and China, pilgrims began to seek the origins of Buddhism, visiting its holy sites and bringing home its sacred texts. The travels of fifty-four Buddhists, starting as early as 260 CE, are documented in Chinese sources.

Hsuan-tsang, also known as “Xuanzang,” was a Chinese Buddhist monk; like many others he sought a more



The Great Mandala, which provides an outline of Japanese Nichiren Buddhism.

in-depth understanding of his faith by seeking out original documents and visiting places where the faith began in India. Xuanzang began his 16,000-kilometer journey in 629 CE and returned in 645. As Xuanzang began his journey, the Tang dynasty (618–907 CE) emperor, Taizong, was beginning to restore China and make it a powerful force in central Asia.

Xuanzang encountered Buddhist stupas (usually dome-shaped structures serving as Buddhist shrines) at Balkh and two large Buddhist figures at Bamian in Afghanistan. Although many areas of former Buddhist

Believe nothing just because a so-called wise person said it. Believe nothing just because a belief is generally held. Believe nothing just because it is said in ancient books. Believe nothing just because it is said to be of divine origin. Believe nothing just because someone else believes it. Believe only what you yourself test and judge to be true. • BUDDHA (c. 563–c. 483 BCE)

expansion were in decline, Xuanzang found in Kashmir one hundred Buddhist monasteries and five thousand monks. Welcomed in India at Nalanda by thousands, Xuanzang found a place of intellectual ferment. Cave paintings at Dunhuang record the triumphant passage of Xuanzang back to China; Xuanzang finished *The Record of the Western Regions* in 646 to document his journey. Gaozong, Taizong's son and successor, built the Big Wild Goose Pagoda at Xuanzang's urging to house relics and Buddhist scriptures.

A chaotic period of religious exchange and development began with the rise of the Mongols during the 1100s and 1200s. The Silk Road's pivotal role in cultural and religious exchange eventually declined with the advent of the Age of Exploration during the fifteenth and sixteenth centuries. Additionally, Muslim control of long-distance trade routes helped to enhance the Islamization of central Asia. Central Asian peoples apparently therefore accommodated themselves to those people who were the major participants in their trade connections. Trade led to cultural exchange; thus trade was an important factor in spreading the world's great religions.

Buddhism in China and Japan

Buddhism, Christianity, and Islam spread in various areas, but to truly make a home in foreign lands these faiths often accommodated themselves to the local culture and modified or even changed some of their values or traditions. In China Buddhists spreading the faith emphasized the compassionate aspects of the faith rather than the disciplined aspects of Theravada Buddhism, and Nestorian Christians used Daoist (relating to a religion

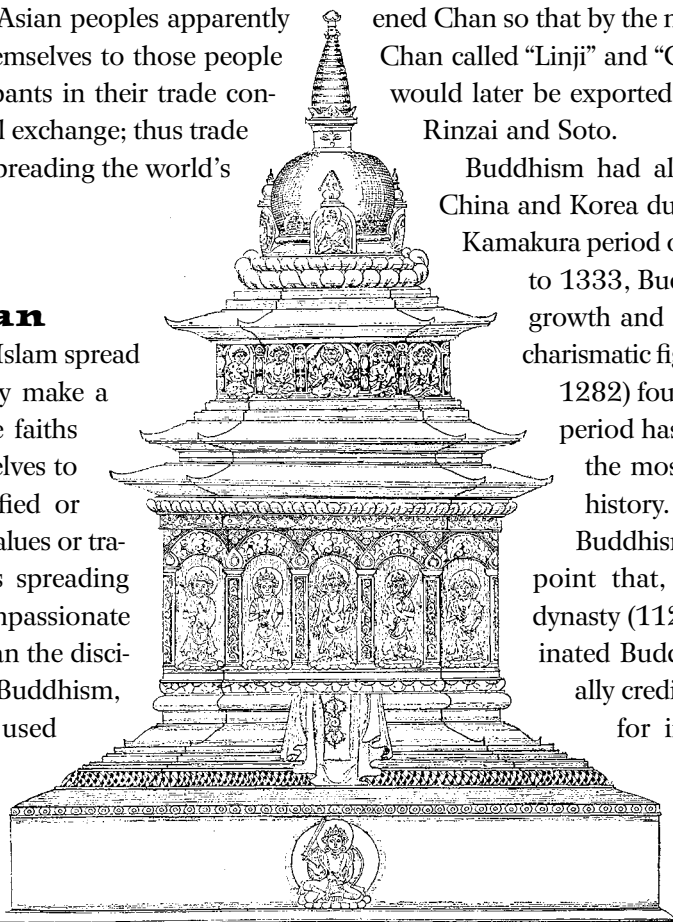
developed from Daoist philosophy and folk and Buddhist religion) or Buddhist terms, calling the books of the Bible "sutras" (precepts summarizing Vedic teaching).

Buddhism reached China by the first century CE, and a number of Mahayana sects developed there, including Tiantai, Huayan, Pure Land, and Chan. Pure Land developed as a way to reach the general population without its members having to grasp all the intricate philosophical teachings of Buddhism. Followers of Pure Land simply were to call or chant the name of Amitabha Buddha for salvation in paradise or the Pure Land.

The Indian monk Bodhidharma is reputed to have brought Chan Buddhism to China during the sixth century CE. The word *Chan* (*Zen* in Japanese) derives from the Sanskrit word *dhyana* and means "meditation," so Chan is meditation Buddhism. Towering figures such as Huineng (638–713) and Zhaozhou (778–897) strengthened Chan so that by the ninth century major schools of Chan called "Linji" and "Caodong" had developed and would later be exported to Japan as the Zen sects of Rinzai and Soto.

Buddhism had already arrived in Japan from China and Korea during the 500s CE. During the Kamakura period of Japanese history, from 1185 to 1333, Buddhism experienced dramatic growth and reinvigoration. Energetic and charismatic figures such as Nichiren (1222–1282) founded new sects. The medieval period has been characterized as one of the most religious times in Japanese history.

Buddhism had evolved in China to the point that, during the Southern Song dynasty (1127–1279), Chan or Zen dominated Buddhist teachings. Scholars usually credit Myozen Eisai (1141–1215) for introducing Rinzai Zen and Dogen Kigen (1200–1253) for introducing Soto Zen. The Rinzai sect emphasizes *koan* (spiritual exercise) as its prime tool for achieving



A Buddhist shrine.

The Art and Architecture of the Buddhist World

The Great Struggle of the Buddha

The excerpt below comes from the Jatakas, stories told about significant events in the life of Buddha.

Now the Future Buddha, having thus retired from the world,—in that place there was a mango-grove named Anupiya, and here he first spent a week in the joy of having retired from the world,—in one day went on foot to Rajagaha, a distance of thirty leagues, and entering the city, he begged for food from house to house, without passing any by. . . .

Now the Great Being, after collecting a number of scraps, sufficient, as he judged, for his sustenance, left the city by the same gate he had entered, and sitting down with his face to the east, in the shade of Pandava rock, he attempted to eat his meal. But his stomach turned, and he felt as if his inwards were on the point of coming out by his mouth. Thereupon, in the midst of his distress at that repulsive food,—for in that existence he had never before so much as seen such fare,—he began to admonish himself, saying, “Siddhattha, although you were born into a family having plenty to eat and drink, into a station in life where you lived on fragrant third season’s rice with various sauces of the finest flavors, yet when you saw a monk clad in garments taken from the rubbish heap, you exclaimed, ‘Oh, when shall I be like him, and eat food which I have begged? Will that time ever come?’ And then you retired from the world. And now that you have your wish, and have renounced all, what, pray, is this you are doing?” When he had thus

admonished himself, his disgust subsided, and he ate his meal. . . .

Then the Future Buddha . . . proceeded on his way; and coming to Alara Kalama and Uddaka, the disciple of Rama, he acquired from them the eight stages of meditation. But becoming convinced that they did not lead to enlightenment, he ceased to practise them. And being desirous of making the Great Struggle, so as to show the world of gods and men his fortitude and heroism, he went to Uruvela, and saying, “Truly, delightful is this spot,” he there took up his abode, and began the Great Struggle. . . .

And the Future Buddha, thinking, “I will carry austerities to the uttermost,” tried various plans, such as living on one sesamum seed or on one grain of rice a day, and even ceased taking nourishment altogether, and moreover rebuffed the gods when they came and attempted to infuse nourishment through the pores of his skin. By this lack of nourishment his body became emaciated to the last degree, and lost its golden color, and became black, and his thirty-two physical characteristics as a great being became obscured. Now, one day, as he was deep in a trance of suppressed breathing, he was attacked by violent pains, and fell senseless to the ground, at one end of his walking-place.

Source: Warren, H. C. (Trans.). (1896). *Buddhism in translation*. Cambridge, MA: Harvard University Press.

understanding and enlightenment, whereas the Soto sect emphasizes *zazen* (sitting meditation). Both Eisai and Dogen studied in China under Chan masters, receiving recognition of their enlightenment—an official document of lineage is important in Zen and helps to provide credentials to teach upon one’s return home. During the twentieth century, appreciation of Dogen’s work grew, and today Dogen is perceived as one of Japan’s greatest geniuses and the most noted Zen figure in Japan.

With the influx of Chinese masters during the 1200s and 1300s, Japanese Zen more closely resembled its Chinese Chan counterpart. In fact, the Five Mountains sys-

tem of temple organization, which arose during the late 1300s, was based on the Chinese model. The ironic aspect of Zen growth is that Zen had few real practitioners. Its primary role initially was transmitting Chinese culture to Japan. The Japanese and Chinese masters achieved influence and success because of their access to Chinese culture during the Song dynasty (960–1279).

Buddhism and the West

Much of the early Western exposure to Buddhism came through the Japanese. Eight people, including three Buddhist priests, represented Japanese Buddhism at the



The great Buddhist Temple at the Summer Palace in Beijing. This temple was used by the emperors to worship when they retreated to the summer palace during the hottest months.

Buddhism's rise is also because of dedicated teachers, such as Sylvia Boorstein, Chogyam Trungpa, and Jon Kabat-Zinn, who have helped to popularize the faith. The Vietnamese monk Thich Nhat Hanh has had an important influence on U.S. Buddhism. The Dalai Lama (the spiritual head of Tibetan Buddhism) also has promoted a more engaged Buddhism with his pleas for Tibetan freedom from China. The Tibetan diaspora (scattering) has opened up access to teachers and lamas (monks) who, until the Chinese occupied Tibet in 1959, were little known outside their own country. The Dalai Lama himself has come to symbolize for many the face of Buddhism shown to the world. His character and compassion in the face of difficulties for his own people exemplify for many the best attributes of the Buddhist life.

Shunryu Suzuki was a Japanese Zen priest who came to the United States in 1959 and settled at a small temple in San Francisco.

World Parliament of Religions in 1893, held in Chicago. The writings of D. T. Suzuki helped to open Western eyes to Buddhism and began to popularize Zen Buddhism. During the last half of the twentieth century, new patterns of immigration and many U.S. and European citizens who turned to non-Western faiths helped Islam, Buddhism, Hinduism, Confucianism, and Daoism have an impact on Western culture. Older and recent emigrants from Asia—Chinese, Koreans, Vietnamese, and Tibetans—have played a large role in establishing a Buddhist foothold in the West and exposing Westerners (Euro-Americans) to the traditions of Asia.

Buddhism's rise in the United States can be attributed to people's search for answers and the rapid changes brought about by a modern and consumer-driven society.

He is credited with establishing the first Zen monastery in the United States at Tassajara, California, in 1967. *The Three Pillars of Zen* (1965) by Philip Kapleau was one of the first books in English that discussed the practice of Zen Buddhism. The book has had an impact far beyond the students of Kapleau because many people in the United States lacked access to a Buddhist teacher but were shown how to begin meditating and practice on their own by Kapleau's book. Much of the Buddhist faith in Asia is centered on the *sangha*, whereas in the United States no real *sangha* exists.

Buddhism and Change

Buddhism flowered in the West during the last three decades of the twentieth century, and Zen became a cot-



tage industry. What attracted Westerners, particularly well-educated and professional people, to the faith? The beliefs of Buddhism “are more compatible with a secular scientific worldview than those of the more established Western religions” (Coleman 2001, 205).

In a world that grows smaller each day, the Internet has provided a link to the Buddhist communities of the world and has begun to house the vast amount of Buddhist scriptural writing. The Internet may hold hope for many who practice alone or who are in ill health to have access to qualified teachers. Nonetheless, Buddhism is uniquely suited to isolated practice and meditation. Whether Buddhism will continue to broaden its appeal in the West is difficult to say. Even in Asia monasteries and monkhood are difficult choices in an ever-broadening world consumer culture. Buddhism, like many of the great faiths of the world, has found ways to adapt and survive for centuries. Buddhism continues as a way, the Middle Way, to work toward peace, compassion, and enlightenment. Yet, we have only to look back to the Buddha’s own words to find the future of Buddhism. The Buddha said that the only really permanent thing in this world is change.

Phillip Whigham

See also Siddhartha Gautama

Further Reading

- Adler, J. (2002). *Chinese religious traditions*. Upper Saddle River, NJ: Prentice Hall.
- Bentley, J. (1993). *Old World encounters. Cross-cultural contacts and exchanges in pre-modern times*. New York: Oxford University Press.
- Broughton, J. (1990). *The Bodhidharma anthology: The earliest records of Zen*. Berkeley and Los Angeles: University of California Press.
- Buddhist suttas: Major scriptural writings from early Buddhism* (T. W. Rhys Davids, Trans.). (2000). Escondido, CA: Book Tree. (Original work published 1881)
- Burt, E. A. (Ed.). (1982). *The teachings of the compassionate Buddha*. New York: Penguin Books.
- Chadwick, D. (1999). *Crooked cucumber: The life and Zen teaching of Shunryu Suzuki*. New York: Broadway Books.
- Coleman, J. W. (2001). *The new Buddhism: The Western transformation of an ancient tradition*. New York: Oxford University Press.
- Dhammapada: The sayings of the Buddha* (T. Byrom, Trans.). (1993). Boston: Shambhala.
- Dumoulin, H. (1976). *Buddhism in the modern world*. New York: Macmillan.
- Dumoulin, H. (1994). *Zen Buddhism: A History: Vol. 1. India and China* (J. Heisig & P. Knitter, Trans.). New York: Macmillan.
- Foltz, R. (1999). *Religions of the Silk Road. Overland trade and cultural exchange from antiquity to the fifteenth century*. New York: St. Martin’s Press.
- Goddard, D. (Ed.). (1966). *A Buddhist bible*. Boston: Beacon Press.
- Hakuin. (1999). *Wild ivy: The spiritual autobiography of Zen master Hakuin* (N. Waddell, Trans.). Boston: Shambhala.
- Huang Po. (1958). *The Zen teaching of Huang Po: On the transmission of mind* (J. Blofeld, Trans.). New York: Grove Press.
- Hui-neng. (1998). *The sutra of Hui-neng* (T. Cleary, Trans.). Boston: Shambhala.
- Joshu. (1998). *The recorded sayings of Zen master Joshu* (J. Green, Trans.). Boston: Shambhala.
- Kapleau, P. (1989). *The three pillars of Zen: Teaching, practice, and enlightenment*. New York: Anchor.
- Keizan. (1990). *Transmission of light (Denkoroku): Zen in the art of enlightenment* (T. Cleary, Trans.). San Francisco: North Point Press.
- Lin-chi. (1993). *The Zen teachings of master Lin-chi: A translation of the Lin-chi lu* (B. Watson, Trans.). New York: Columbia University Press.
- Liu, X. (1998). *The Silk Road: Overland trade and cultural interactions in Eurasia*. Washington, DC: American Historical Association.
- Nagarjuna. (1995). *The fundamental wisdom of the Middle Way: Nagarjuna’s Mulamadhyamakakarika* (J. L. Garfield, Trans.). New York: Oxford University Press.
- Nukariya, K. (1973). *The religion of the samurai: A study of Zen philosophy and discipline in China and Japan*. London: Luzac.
- Prebish, C., & Baumann, M. (Eds.). (2002). *Westward dharma: Buddhism beyond Asia*. Berkeley and Los Angeles: University of California Press.
- Rahula, W. S. (1974). *What the Buddha taught*. New York: Grove Press.
- Shantideva. (1997). *The way of the bodhisattva: A translation of the Bodhicaryavatara* (Padmakara Translation Group, Trans.). Boston: Shambhala.
- Skilton, A. (1994). *A concise history of Buddhism*. New York: Barnes & Noble.
- Suzuki, D. T. (1956). *Zen Buddhism: Selected writings of D. T. Suzuki*. New York: Image Books.
- Suzuki, S. (1996). *Zen mind, beginner’s mind: Informal talks on Zen meditation and practice*. New York: Weatherhill.
- Tanabe, G., Jr. (1999). *Religions of Japan in practice*. Princeton, NJ: Princeton University Press.
- Threefold lotus sutra* (B. Kato, Y. Tamura, & K. Miyasaka, Trans.). (1997). Tokyo: Kosei Publishing.
- Vimalakirti sutra* (B. Watson, Trans.). (1997). New York: Columbia University Press.
- Wriggins, S. (1996). *Xuanzang: A Buddhist pilgrim on the Silk Road*. Boulder, CO: Westview Press.
- Wumen, H. (1997). *Unlocking the Zen koan: A new translation of the Zen classic Wumenguan* (T. Cleary, Trans.). Berkeley, CA: North Atlantic Books.
- Yoshinori, T. (Ed.). (1999). *Buddhist spirituality in later China, Korea, and Japan*. New York: Crossroad.

Bullroarers

Bullroarers are devices consisting of a small slat and a string that are whirled to make a roaring sound. However they are defined—as toy, musical instrument, communication device, work of art, or ritual object—bullroarers have fascinated human beings throughout history. No precise formula exists for making a bullroarer. A fully functional bullroarer can be made by simply attaching a 1.2-meter-long string through the hole at the end of a 30-centimeter-long wooden ruler and swinging it overhead from the end of the string. The ruler will spin rapidly on its long axis, creating a roaring sound or “call.”

The quality and impact of a bullroarer’s call vary with factors such as the strength, endurance, and expertise of the person who swings the bullroarer. Other factors include component materials of both slat (such as wood, flint, slate, bone, ceramics) and string (such as fiber, hair, gut, leather); weight; shape and length; thickness and edge detailing; environmental acoustics (proportions of open or enclosed space, resonance, damping, humidity); social context; ambient sounds (other bullroarers, chants, gongs, drums, environmental noise); age of the listener; and presence of visual, olfactory, and other sensory stimuli.

From the late 1800s until well into the twentieth century, anthropologists worldwide recorded bullroarer mythologies, rituals, and initiation traditions and argued their significance in theories of diffusion and independent invention. Social evolutionists used the bullroarer as a gauge of progress “up” the civilizational ladder, with Britain at the top, its bullroarers having “deteriorated” into toys as superstition was overcome by science. Lower on the ladder were peasant Spain, where bullroarers were ritually swung on Good Friday, and indigenous cultures in North and South America who used bullroarers to summon wind and rain, promote fertility among game animals and crops, and ward off evil spirits. In “primitive” Australia and New Guinea researchers found thriving and almost unfathomably complex ancestral bullroarer “cults.” Women and girls, researchers were

told, neither knew about nor, under pain of death, could see bullroarers. Young men newly circumcised and subincised—that is, whose penises were either split along the underside or top or the heads of which were completely bifurcated—were given small bullroarers to swing both to promote healing and to warn off females. At the same time, sacred traditions across many cultures held that the bullroarer was either given to, discovered by, or born of a woman who ultimately surrendered it to men.

Infrasonics & Consciousness Modification

During the mid-1980s a radical reassessment of bullroarers began when acoustic scientists determined that bullroarers produce a range of infrasonics, which are extremely low-frequency sound waves (20 hertz or less) that are below the human auditory threshold but nonetheless enter the human brain. Thunder, earthquakes, waterfalls and waves, whales and sharks, cassowaries (birds related to the emu), deep drums and gongs, chants, jet planes, and bass boosters all generate infrasonics. These sound waves are picked up by the cochlea (labyrinth) of the ear and influence the vestibular (relating to the perception of body position and movement), and circadian (occurring in twenty-four-hour cycles) systems of the brain. Infrasonics stimulate a wide array of euphoric, eerie, and/or deeply traumatic trance-like and hallucinogenic states, and serotonin (a neurotransmitter) nerves may be central to this process.

Awareness of and experimentation with infrasonics in military applications, performance, rock art research, ritual, therapy, persuasion, and learning have grown exponentially with contemporary brain research. Infrasonics fall within the same frequency range as brain waves, and brain waves have been experimentally linked to a variety of mood and thought patterns. Theta brain waves (5–8 hertz) are associated with creativity and insight; alpha waves (8–13 hertz) with relaxed meditative states; and beta waves (13–30 hertz) with fully awake, analytical thinking. Different parts of the brain simultaneously generate different waves, and researchers have only begun to imagine how environmental infrasonic mixes might actu-

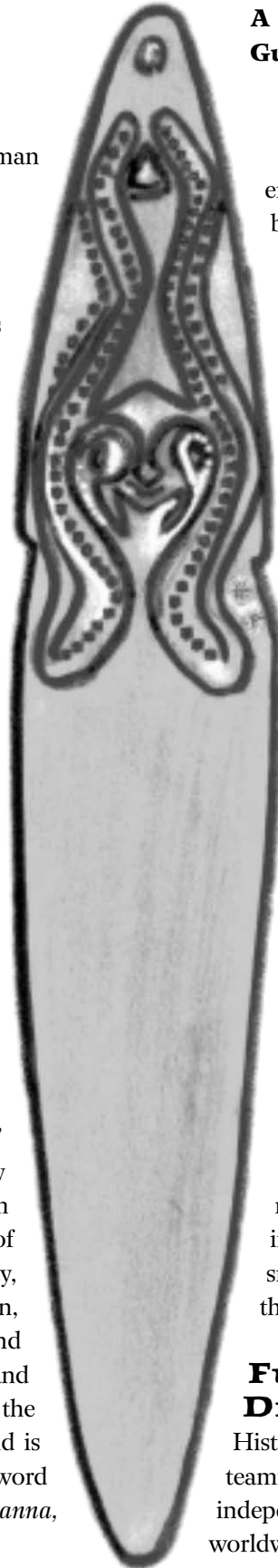
ally shape or even have given birth to human consciousness.

Traditional Symbolism

Cultures have universally linked bullroarers to spirit beings in the sky. In general, until the present proliferation of bullroarers for performance art and ritual, bullroarers worldwide were carved or painted to acknowledge the constellation of Orion, thunder and lightning, the Milky Way galaxy, rhombs, the *vesica piscis* (vessel of the fish), and/or optical illusions (especially fine line grids that create virtual color).

The oldest bullroarers are the foraging (Paleolithic) era *batons de commandement* made of bone and incised with images of animals, lozenges (rhombic diamond shapes), zigzags, and astronomical references. A sixty-five-hundred-year-old bullroarer was found at Çatalhuyük in Anatolia (modern Turkey). Given that people traditionally rubbed bullroarers with pigments, red ochre, oils, and/or fats, fifty-four-hundred-year-old rhombic cosmetic palettes from late predynastic Egypt likely were swung.

In classical Greek mythology a *rhombos* (meaning “bullroarer” but also “rhomb,” “penis,” and “fish”) was given as a toy to baby Dionysus just before his father, Zeus, had him killed by the Titans. Reborn from the thigh of his father, Dionysus lived on as god of fertility, vegetation, wine, and ecstasy. Much like Orion, he is associated with death, rebirth, and immortality. The word *bullroarer* is English and probably relates to Orion, who stands in the Milky Way just south of Taurus the Bull and is visible from every part of the globe. The word *Orion* derives from the Akkadian word *Uru-anna*, meaning “Light of Heaven.”



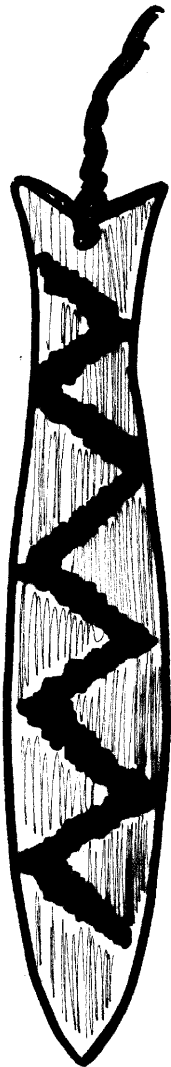
A drawing of a New Guinea bullroarer.

Several researchers have noticed, but then generally ignored, the astonishing similarity between bullroarer cults in Australia and New Guinea and the Greek myth of the castration of Uranus (Ur-anus) by the goddess Gaia (which can be translated as “dung ball”) and her children. Many Australian bullroarers, which are almost exclusively shaped like Vesicas (the oval created by the overlapping of two circles), are called by names closely related to a word for “excrement.” Well into the twentieth century the ceremonial ground on which youth initiations and circumcisions took place (and on which bullroarers were swung) was sometimes called “place of excrement.” Many interpreters believe that the bullroarer represents a penis and that the sanctification of excrement relates to ritual homosexuality that occurs in some initiatory rites. In other instances two bullroarers are ceremonially bound together and labeled “womb,” however.

Fish-shaped bullroarers may relate to ancient traditions about spinning dolphins that assist humans. Recent iconographic research ties the dolphin (Greek *delphys*), the womb (Greek *delphis*), and the lozenge shape (rhomb) to the constellation Delphinus the Dolphin (stars that form a rhomb on a string). The contemporary Dogon tribe of Mali in northwest Africa uses a fish-shaped bullroarer named “*po*,” which is also the name for its most important dietary seed grain (*fonio*) and the small, dark companion star of Sirius (beneath the foot of Orion).

Future Research Directions

History, anthropology, and the neurosciences are teaming up to decipher the roles of diffusion and independent invention in the remarkably uniform worldwide tradition of bullroarers. A major task is to



**A drawing of a South American bullroarer;
actual size about 8 by 1.4 inches.**

understand the subtleties employed in generating the calls of the bullroarer and their role in the creation of human belief systems—especially the spectrum of physical, emotional, and hallucinogenic responses to beneficial (15 hertz and above) and potentially “toxic” (below 10 hertz) infrasonics. Of particular significance is the frequent reporting in ethnographic literature across cultures reports that bullroarers actually preceded deities or ancestor spirits. The archaeologist Robert L. Hall has argued persuasively that bullroarer and flint knife traditions can be analytically joined, thus providing an important window on the interpretation of historical artifacts such as the Aztec Sun Stone, whose tongue is a fish-shaped flint knife (*Tecpatl*) traditionally believed to have preceded the creation of the gods.

Bethe Hagens

Further Reading

- Allen, R. H. (1963). *Star names: Their lore and meaning*. New York: Dover Publications.
- Dundes, A. (1976). A psychoanalytic study of the bullroarer. *Man*, 11(2), 220–238.
- Fletcher, N. H., Tarnopolsky, A. Z., and Lai, J. C. S. (2002) Rotational aerophones. *Journal of the Acoustical Society of America*, 111, 1189–1196.
- Hall, R. L. (1983). A pan-continental perspective on red ocher and glacial Kame ceremonialism. In R. C. Dunnell & D. K. Grayson (Eds.), *Anthropological papers: Lulu linear punctuated: Essays in honor of George Irving Quimby* (pp. 75–107). Ann Arbor, MI: Museum of Anthropology, University of Michigan.
- Purdey, M. (2003). Does an infrasonic acoustic shock wave resonance of the Mn 3+ loaded/CU depleted prion protein initiate the pathogenesis of TSE? *Medical Hypotheses*, 60(6), 797–820.
- Ramsayer, K. (2004). Infrasonic symphony: The greatest sounds never heard. *Science News*, 165(2), 26–28.
- Salvatore, G. (2001). Can archetypes be heard? Retrieved February 1, 2004, from <http://www.gianfrancosalvatore.it/englishsection/musicworks.html>
- Spencer, B., & Gillen, F. J. (1969). *The northern tribes of central Australia*. Amherst, NY: Prometheus Books.
- Tuzin, D. (1984). Miraculous voices: The auditory experience of numinous objects. *Current Anthropology*, 25(5), 579–596.
- Williams, F. E. (1976). Bull-roarers in the Papuan Gulf. In E. Schwimmer (Ed.), *Francis Edgar Williams: “The Vailala madness” and other essays* (pp. 73–122). London: C. Hurst & Company.
- Zerries, O. (1942). *Das schwirrholz* [The bullroarer]. Stuttgart, Germany: Strecker and Schroder.

Byzantine Empire

The Byzantine empire was a Christian, Greek-speaking, multiethnic continuation of the Eastern Roman empire, and, as an entity that developed organically out of the Roman empire and its ancient Mediterranean civilization, it has no clear starting point. Many date its origins to the year 330 CE, when Emperor Constantine I (the Great) established his new imperial capital, Constantinople (modern Istanbul), on the site of an ancient Greek city known as Byzantium (*Byzantium* in Latin). Others favor the mid-sixth century during the reign of Justinian I the Great (reigned 527–565 CE), the last emperor of Constantinople to speak Latin as his native tongue, who presided over Byzantium’s First Golden Age and whose policies dominated much of Byzantium’s subsequent history, for good and ill. Still others argue that the Byzantine empire only emerged as a distinctive civilization and empire after the Arab conquests of the seventh century ended classical Greco-Roman civilization in the Eastern Mediterranean and North Africa.

Whatever its point of origin, the Byzantine empire ended on 29 May 1453, when Ottoman Turkish forces captured Constantinople, the last, small remnant of a once-vast empire. Even this event, however, did not snuff out Byzantine culture, which continued to inspire various Eastern Orthodox Christian peoples, most notably Greeks, Russians, Ukrainians, Romanians (Rumanians), Bulgarians, and Serbs. In addition, Byzantine influences on Ottoman culture, especially that of the court of the sultan, were significant.

The Byzantine Self-Image

The term *Byzantine* is modern, coined by historians to underscore the distinctive qualities of the civilization centered in Constantinople that emerged sometime between the fourth and seventh centuries of the Common Era. The Byzantines always referred to themselves as *Romaioi*, Romans, and viewed their capital city as New Rome.

Constantinople

Located on the Bosphorus, a short, narrow strait that separates Anatolia from Thrace (the far southeastern corner of Europe) and connects the Sea of Marmara with the Black Sea, Constantinople was ideally situated. The city was the natural meeting place of East and West, which was a major factor in Constantinople's early growth in population and wealth. The city possibly housed as many as 500,000 people at its demographic high point in the early sixth century before a series of plagues beginning in 542 CE caused a downward spiral in population, from which it never fully recovered.

Its location and riches also made it one of the most besieged cities in the history of the world. Its massive triple land walls and superior harbor allowed it to resist the attacks of Goths, Huns, Persians, Avars, Slavs, Arabs, Magyars, Bulgars, Pechnevs, Vikings, Russ, Seljuk Turks, European crusaders, and a wide variety of other peoples. Only on two occasions, in 1204 and 1453, did Constantinople fall to the assault of a foreign army.

The Empire's Boundaries

Due to the vicissitudes of history, the boundaries of the empire were in constant flux. At their greatest extent under Justinian the Great in the mid-sixth century, Byzantine lands included Italy, Sicily, North Africa, and southeastern Spain, as well as Syria-Palestine, Egypt, the Balkans as far north as the Danube, and Anatolia (modern Asiatic Turkey) as far east as Armenia. The rise and expansion of Islam in the seventh century resulted in Byzantium's losing Syria-Palestine, Egypt, and North Africa. Earlier it had lost its foothold in Spain and most of Italy to Germanic forces, and in the ninth century

Byzantium lost Sicily to Arab invaders from North Africa. In 1071 its last Italian outpost, Bari, fell to Norman French invaders, but only after Byzantine civilization had left a permanent imprint on the culture of southern Italy. Because of Byzantium's long presence in southern Italy, knowledge of Greek and study of Greek texts never totally vanished in the West during the so-called Middle Ages.

Despite these territorial losses, the empire remained a major power in the Eastern Mediterranean down to around the year 1200 because it held on to much of its heartland—the Balkans, Greece and the Aegean Islands, and Anatolia—despite invasions by hostile neighbors, including the Bulgars and Normans in the Balkans and Seljuk Turks in Anatolia. This territorial core made it an empire that continued to straddle portions of Europe and Asia. Byzantine merchant vessels and war ships were equally at home on the Mediterranean and the Black Sea, and the trading emporiums of North Africa, Western Europe, Inner Asia, and Southwest Asia, were all within easy reach.

After 1204, however, the empire's heartland began to shrink appreciably due to conquests by Western Europeans and Ottoman Turks. By the year 1400 the empire was a shadow of its former self.

God-Anointed Emperors

As successors of Constantine the Great (reigned 306–337 CE), the first Christian Roman emperor, Byzantine emperors claimed the title “equal of the apostles” and saw themselves as responsible for the well-being of all Christians, not just those who inhabited lands controlled directly by the empire. Consequently, Byzantine foreign policy, both in respect to Christian and non-Christian powers alike, was aimed at securing acknowledgment of the emperor's position as head of the Christian world and protector of all Christians, no matter where they might reside.

As defenders of the orthodox (i.e., correctly believed) faith and Roman legitimacy, Byzantium's emperors normally pursued defensive military and territorial policies. Much like China's emperors, territorial expansion was



usually far less important to those who sat on the Byzantine throne than acknowledgment by their neighbors of the emperor's unique place in the world. Although the empire had a few notable military emperors, such as Basil II, who aggressively expanded Byzantium's borders, its leaders, also like their Chinese counterparts, mainly employed military action as a last resort, preferring the tactics of bribery, diplomatic marriages, and awe-inspiring court ceremony to neutralize potential and real enemies.

Byzantium and Its Neighbors

As an empire that sat astride a web of land routes and sea routes connecting much of the Afro-Eurasian world, the Byzantine empire employed in its service large numbers of foreigners, both Christian and non-Christian. Mercenaries from a wide variety of Turkic and Western European cultures played key roles in Byzantium's armies.

Although generally conservative in exercising military

power, Byzantium's emperors had a sense of mission when it came to spreading the faith peacefully among their pagan neighbors. Indeed, exporting missionaries to the Slavic peoples of the Balkans and Russia was an integral part of Byzantine foreign policy in the ninth and tenth centuries. At the same time these same emperors showed no particular desire to convert Zoroastrians in the Sasanian empire of Persia or Muslims, who in the mid-seventh century replaced the Sasanians as Byzantium's greatest rival.

Holy war, either in defense of the faith or to spread it, was also a concept largely absent from the Byzantine mind. There were two notable exceptions to this Byzantine distaste for holy war. During the reign of Heraclius (reigned 610–641 CE), a life-or-death struggle with the Sasanian empire, whose armies had sacked Jerusalem and carried off the relic of the True Cross, assumed the proportions of a holy war. Following the capture of Constantinople in 1204 by the army of the Fourth Crusade,

The bravest are surely those who have the clearest vision of what is before them, glory and danger alike, and yet notwithstanding, go out to meet it. • THUCYDIDES (460 BCE–404 BCE)

a Byzantine empire-in-exile at Nicaea in Anatolia fostered the notion of holy war to recapture the sacred city of Constantinople, until finally the city was retaken in 1261.

Byzantine Cultural Exports

Constantinople was a city of numerous churches, including the massive *Hagia Sophia*, the Church of the Holy Wisdom. Built between 532 and 537 CE, it and its slightly earlier prototype, the Church of Saints Sergius and Bacchus, signaled the genesis of a new form of ecclesiastical architecture—the Byzantine domed church—that proliferated throughout the empire and beyond. During Byzantium’s First Golden Age of the sixth century, the five-domed Church of the Holy Apostles was raised on Constantinople’s highest hill. The burial place of emperors, it served as the model for the five-domed basilica of San Marco in Venice and numerous Slavic Orthodox churches in Eastern Europe.

In addition to architecture on a grand scale, Constantinople (as well as other major Byzantine cities, such as Thessaloniki) was also a center of ancient Hellenic and Christian studies. Secular Hellenic literature, philosophy, and science—including the study of the works of Homer, Plato, and Euclid—provided the core of an upper class Byzantine’s education. But the Byzantines did not keep this learning to themselves.

Byzantium’s preservation of many of the classic literary and philosophical texts of ancient Greece, especially the *Dialogues* of Plato, made possible their direct transmission to the West in the fourteenth and fifteenth centuries, where they were avidly studied by Italian humanist scholars. Earlier, during the ninth century, Caliph al-Muammar established the House of Wisdom in Baghdad, where Byzantines and Muslims cooperated in translating into Arabic a vast body of ancient Greek scientific knowledge, especially treatises on medicine and other “practical” sciences, such as mathematics, geography, and astronomy. These texts, which traveled from the schools of Byzantium to Baghdad, had a profound impact throughout the Islamic world. And it was largely from Muslim Spain, al-Andalus, that the works of Aristotle and Galen entered

Christian Western Europe during the twelfth century. These texts, preserved by Byzantium, translated into Arabic, and then translated into Latin, were key factors in an intellectual and educational revolution that some label “Europe’s Twelfth-Century Renaissance.”

During the ninth and tenth centuries, as Byzantine secular learning was permeating the intellectual world of Dar al-Islam, Byzantine Christian studies were transforming the cultures of many Slavic peoples.

During the 860s CE the brothers Constantine (also called Cyril) and Methodius worked as missionaries in Moravia and translated the Gospels and a wide variety of other church literature from Greek into Slavic. Whereas the Western Church, with its center in Rome, imposed the Latin liturgy and Latin ecclesiastical scholarship on all of its converts, the Byzantine Church allowed converts from other cultures to retain their own languages in the liturgy and to read religious texts in their own tongues. With that in mind, Constantine-Cyril created a Slavic alphabet, which he based on the Greek alphabet but modified to accommodate particular Slavic sounds. As reworked later by disciples of the two brothers, it became the Cyrillic alphabet.

Beyond creating an alphabet, Constantine-Cyril was also instrumental in crafting a Slavic sacred language—Old Church Slavonic—that he based on a southern Macedonian dialect. Because the brothers and their associates translated the Bible and a huge volume of other religious literature into Old Church Slavonic, it rapidly became an ecumenical language, which all Orthodox Slavic churchmen, regardless of their regional dialects, learned and used. Beyond that, it rapidly became a flexible literary tool. Original works, such as the life of Saint Constantine-Cyril and monastic chronicles, soon appeared alongside imported religious texts.

Laying Byzantium’s Foundations (324–476 CE)

In 324 Constantine I, Roman emperor of the West and a champion of Christianity, defeated and killed his pagan imperial colleague, Licinius, Roman emperor of the East.

Now, for the first time since 293, the Roman empire was united under a single ruler. In honor of his victory, Constantine ordered that Byzantium be expanded and rededicated as Constantinople (Constantine's City). Dedicated on 11 May 330, the city served as Constantine's residence until his death in 337.

During these latter years of his life, Constantine established the principle that the Church enjoyed the legitimacy of imperial authority and its doctrines carried the force of imperial law. All of Constantine's successors were baptized Christians, even Julian (reigned 361–363), named "the Apostate," who renounced the faith and unsuccessfully tried to restore the ancient pagan civic cults. By the reign of Theodosius I (reigned 378–395), the last Roman emperor to rule over both halves of the empire, the marriage between church and state was complete. In 391 Theodosius promulgated a series of edicts against paganism that transformed Christianity into the sole state religion.

Meanwhile, during the last quarter of the fourth century, Goths and other Germans were crossing the Roman empire's frontiers in increasing numbers. Although they had no intention of destroying it, their cumulative impact led to the breakdown of the imperial system in the western half of the empire, which had had its own Roman emperors since 395. When the last Western Roman emperor, Romulus Augustulus, was deposed in 476, the theory was that the empire was again reunited under a single emperor, Zeno, who resided at Constantinople. In fact the West was fast becoming a mosaic of independent Germanic kingdoms, and its culture was already beginning to undergo a process of radical transformation.

While the West was undergoing invasion and metamorphosis, the Eastern Roman empire, which largely managed to deflect the Germans westward, was unable to help it in any substantive way due to its own instability and internal divisions, many of which were religious in nature.

Justinian I and Emperor Heraclius

At this juncture the vigorous Justinian the Great emerged, first as chief counselor to his uncle, Justin I (reigned 518–

527), then as emperor in his own right. Justinian's administrative reforms reinvigorated the empire, but costly wars, a Mediterranean-wide plague that killed off up to one-half of the empire's population, and new invasions by Germanic Lombards in Italy and Turkic Avars and Slavs in the Balkans unraveled many of his gains. Despite setbacks, Justinian presided over an era of artistic creativity and political retrenchment. During his reign a massive rebuilding program changed the face of Constantinople.

In 603 CE the Sasanian Persian empire struck hard in the East and by 622–623 seemed on the verge of conquering the whole Eastern Roman empire. A counterattack led by Emperor Heraclius, however, carried the fight to the enemy, and in 628 Heraclius forced a favorable peace treaty on the defeated and disorganized Persians. In a sense, however, both sides lost, exhausted as they were by the protracted and bitter war.

Eastern Roman weakness made it possible for pagan Slavs to penetrate ever more deeply and fully into the Balkans. Equally menacing were attacks from out of Arabia by a new force, the armies of Islam, which invaded Syria-Palestine in 633–634. Jerusalem fell in 638, and by 641, the year of Heraclius's death, most of Egypt had also been lost.

Byzantium under Siege (641–718 CE)

The seventh century arguably witnessed the birth of a full-fledged Byzantine civilization, but also it was a period in which Byzantium struggled to survive. By 651 the Arabs had overrun Sasanian Persia; it is a wonder that they failed to conquer all of the Eastern Roman empire. In 673 Arab forces initiated a siege of Constantinople that the Byzantines only broke in 677, thanks to a new weapon known as "Greek fire," an incendiary mixture of naphtha and pitch that was projected onto enemy vessels and troops. In 717 the Arabs returned with an immense army and navy but were driven back the following year. Between these two sieges a new hostile force appeared in the Balkans. The Bulgars, a warlike pagan people out of Central Asia, moved into northern Thrace, from which they could not be dislodged. The Bulgarian kingdom

would continue to be a threat to Byzantium for centuries thereafter, even after the Bulgars were converted to Orthodox Christianity in the ninth century.

The Iconoclastic Controversy (726–843 CE)

Like many other Byzantine emperors, Leo III (reigned 717–741), who led Constantinople's successful defense against the Arabs, fashioned himself a theologian. In 726 or 730 he instituted a policy of *Iconoclasm*, or image breaking, which prohibited the production, display, and veneration of icons, sacred images of God or the saints. Although unpopular among the masses, it was official church teaching and practice until the empress-regent Irene reversed it in 787. Leo V reinstated the ban on icons in 815, but Empress-Regent Theodora suppressed Iconoclasm for good in 843.

Although eventually rejected as doctrine, Iconoclasm underscored the widening gap between Byzantium and the Church of Rome, most of whose popes were avid defenders of icon veneration. Moreover, in the middle of the eighth century, amidst the "Iconoclastic Controversy," the papacy turned to a family of Frankish warriors in its search for new defenders. From this family, the Carolingians, came Charlemagne (Charles the Great), whom Pope Leo III crowned Roman emperor on Christmas Day, 800. With its rival Roman emperor, the Latin West was rapidly moving away from its Greek coreligionists in the East.

The Macedonian Dynasty (867–1025 CE)

With the accession of Basil I (reigned 867–886), Byzantium acquired one of its longest surviving and most successful dynasties, a family of Armenian descent known as the Macedonians, under whom the empire enjoyed a Second Golden Age of territorial expansion, prosperity, and artistic innovation.

Under Basil II (reigned 976–1025), known as "the Bulgar-Slayer" because of his conquest of Bulgaria, the empire reached its apogee of prestige and power. The Black Sea was a virtual Byzantine lake, and no other

Bringing Christianity to the Rus'

The following story, which blends fact and fiction, comes from The Russian Primary Chronicle, which was composed in Old Church Slavonic around the year 1113. It purports to tell the story of how Prince Vladimir I of Kiev (reigned 978–1015) was induced to convert to Orthodox Christianity. According to the legend, in the year 987 Vladimir sent envoys to Constantinople to examine the Byzantine faith at the court of Basil II. According to the story, before going to Constantinople, the envoys examined Islamic worship among the Volga Bulgars (who, unlike the Balkan Bulgars, had become Muslims) and Latin Christianity in the German empire of Otto III. Their supposed report follows.

When we journeyed among the Bulgars, we beheld how they worship in their temple, called a mosque, while they stand ungirt. The Bulgar bows, sits down, looks here and there like a person possessed, and there is no happiness among them, but instead only sorrow. . . . Their religion is not good. Then we went among the Germans and saw them performing many ceremonies in their temples; but we beheld no glory there. Then we went to Greece [Constantinople], and the Greeks led us to the edifices where they worship their God, and we did not know if we were in Heaven or on Earth. For on Earth there is no such splendor or such beauty, and we are at a loss to describe it. We only know that God dwells there among men, and their service is more beautiful than the ceremonies of other peoples, for we cannot forget that beauty. Every man, after tasting something sweet, is afterward unwilling to accept that which is bitter, and therefore we cannot dwell here longer." . . . Vladimir then inquired where they should all accept baptism.

Source: Cross, S. H. (Trans.). (1930). *The Russian Primary Chronicle* (pp. 110–111). Cambridge, MA: Harvard University Press. Modified by A. J. Andrea.

empire in western Eurasia—the Abbasids of Baghdad, the Fatimids of Egypt, or the Ottonians of Germany—could rival it.

Seljuks and Crusaders (1071–1204)

On 26 August 1071, a new power in Islam, the Seljuk Turks, destroyed a Byzantine army at Manzikert in eastern Anatolia and captured Emperor Romanus IV. Although Sultan Alp Arslan released Romanus under generous terms, the defeat at Manzikert signaled a crisis. In early 1095 the threat of losing Anatolia to the Seljuks induced Emperor Alexius I (reigned 1081–1118) to request that Pope Urban II induce Western warriors to enlist in Byzantium's armies. The pope responded by transforming this request for mercenaries into a holy war fought by armies independent of Byzantine control and aimed at simultaneously aiding Eastern Christians and liberating Jerusalem. The result was the First Crusade (1096–1102).

Armies of the First Crusade managed to capture Jerusalem in 1099 and established four crusader states in the lands of Syria-Palestine. However, the transit of crusader armies across Byzantine territory, with the conflicts that resulted, as well as the establishment of the crusader states, fomented distrust among Byzantines, especially their emperors, regarding Western motives. Throughout the twelfth century, but especially during the Second (1147–1149) and Third (1188–1192) Crusades, Byzantium's emperors pursued a policy of working to weaken crusader forces that crossed their lands, lest they threaten the integrity of Constantinople. This policy of self-preservation was perceived in the West as evidence of Byzantine perfidy and pro-Muslim sentiments.

Growing distrust of Byzantines did not precipitate the capture of Constantinople on 13 April 1204 by the army of the Fourth Crusade. The factors that led to that capture were complex and largely unforeseen. Mutual animosity engendered by over a century of crusading, however, contributed to the armed clashes that ended in the crusaders' assault on and sack of the city.

The Latin Empire of Constantinople (1204–1261)

The crusader conquerors of Constantinople established a fragile empire that lasted from 1204 to 1261 and encompassed the capital city and much of Greece and the Aegean Islands. Meanwhile, several Byzantine empires-in-exile claimed the mantle of imperial legitimacy, with the most important being located at Nicaea in Anatolia.

In July 1261 Byzantine forces from Nicaea reoccupied Constantinople, which had been left undefended, and a month later Emperor Michael VIII entered the city in triumph. The victory was less meaningful than it appeared. Portions of Greece and the Aegean Islands remained in Western hands. Worse, the events of 1204 had destroyed the myth of Constantinople's invincibility and shattered a civilization.

Borrowed Time (1261–1453)

A severely weakened Byzantine empire barely managed to escape the machinations of Charles of Anjou, king of Sicily, prince of Achaia (southern Greece), and nominal king of Jerusalem. Charles had his eyes on Constantinople as the capital of a grand Mediterranean empire. Circumstances, including his death in 1285, combined to defeat him and save Byzantium.

The Byzantines, however, could not avoid the relentless pressure of a new Turkish foe: the Ottomans. Around 1300 the Ottomans began to expand out from northwestern Anatolia. By 1400 they had conquered all of Anatolia and most of the Balkans, effectively isolating Constantinople. Byzantium, however, received a half-century-long reprieve when the Muslim army of Timur i-Link (Tamerlane) crushed Ottoman forces at Ankara, forcing the Ottomans to abandon their blockade of Constantinople. It took the Ottomans two decades to recover from the disaster.

In 1451 the nineteen-year-old Mehmed II succeeded to the sultanate with plans to take Constantinople. After choking off the city from access to the Black Sea, his forces initiated their attack on 6 April 1453 and breached

the city's walls on 29 May. Eleven centuries after Constantine the Great, the last emperor of Byzantium, Constantine XI, died in the fighting, and his body was never identified.

An empire had fallen, but the culture of Byzantium lived on.

A. J. Andrea

See also Constantine the Great; Crusades, The

Further Reading

- Angold, M. (1997). *The Byzantine empire, 1025–1204: A political history* (2nd ed.). London: Longman.
- Angold, M. (2003). *The fourth crusade: Event and context*. Harlow, UK: Pearson.
- Browning, R. (1992). *The Byzantine empire* (rev. ed). Washington, DC: The Catholic University of America Press.
- Evans, J. A. S. (1996). *The age of Justinian: The circumstances of imperial power*. London: Routledge.
- Haldon, J. F. (1999). *Warfare, state and society in the Byzantine world, 565–1204*. London: UCL Press.
- Harris, J. (2003). *Byzantium and the Crusades*. London: Hambledon and London.
- Kazhdan, A. P. (Ed.). (1991). *The Oxford dictionary of Byzantium*. Oxford, UK: Oxford University Press.
- Laiou, A. E., & Maguire, H. (Eds.). (1992). *Byzantium: A world civilization*. Washington, DC: Dumbarton Oaks Research Library.
- Loverance, R. (1988). *Byzantium*. Cambridge, MA: Harvard University Press.
- Mango, C. (1980). *Byzantium: The empire of new Rome*. New York: Scribner.
- Mango, C. (Ed.). (2002). *The Oxford history of Byzantium*. Oxford, UK: Oxford University Press.
- Miller, D. A. (1969). *Imperial Constantinople*. New York: Wiley.
- Nicol, D. M. (1993). *The last centuries of Byzantium, 1261–1453* (2nd ed.). Cambridge, UK: Cambridge University Press.
- Treadgold, W. (1995). *Byzantium and its army, 284–1081*. Stanford, CA: Stanford University Press.
- Treadgold, W. (1997). *A history of the Byzantine state and society*. Stanford, CA: Stanford University Press.
- Whittow, M. (1996). *The making of orthodox Byzantium*. London: Macmillan.
- Wilson, N. G. (1996). *Scholars of Byzantium* (rev. ed.). Cambridge, MA: Medieval Academy of America.



Caesar, Augustus
Caesar, Julius
Capitalism
Caravan
Carrying Capacity
Cartography
Catherine the Great
Catholicism, Roman
Celts
Cereals
Charlemagne
Charles V
Child, Lydia
Childhood
China
Chinese Popular Religion
Churchill, Winston
Cinchona
Citizenship
Civil Disobedience
Civil Law
Civilization, Barbarism, Savagery
Climate Change
Coal
Coffee
Cold War
Colonialism
Columbian Exchange
Columbus, Christopher
Comintern
Communication—Overview
Communism and Socialism
Comparative Borders and Frontiers
Comparative Ethnology
Comparative History
Computer
Confucianism
Confucius
Congress of Vienna
Constantine the Great
Consumerism
Containment
Contraception and Birth Control
Contract Law
Creation Myths
Crusades, The
Cultural and Geographic Areas
Cultural Ecology
Culture
Cyrus the Great

Caesar, Augustus

(63 BCE–14 CE)

FIRST ROMAN EMPEROR

Grandnephew of Julius Caesar (100–44 BCE), (Gaius Octavius) Augustus eventually replaced his murdered uncle and reigned some forty-four years as one of history's most successful rulers.

Julius Caesar had been training Octavius to be one of his major commanders, and when Caesar was murdered in Rome, the eighteen-year-old Octavius, who was commanding troops in Dalmatia, immediately returned to Rome. There he reluctantly joined forces with Mark Antony, Caesar's trusted friend, who was considered by many to be Caesar's obvious heir. Octavius gained influence through his posthumous adoption as Caesar's son, and in 43 BCE he joined with Antony and (Marcus) Aemilius Lepidus (d. 12 or 13 BCE) in the Second Triumvirate. They declared Julius Caesar a god, eliminated several thousand enemies, and in 42 BCE defeated the primary murderers of Caesar, Marcus Junius Brutus (85–42 BCE) and Gaius Cassius Longinus (d. 42 BCE), at Philippi in Macedonia.

By 36 BCE the Triumvirate was falling apart. Lepidus withdrew, and Octavius used Antony's relationship with Queen Cleopatra of Egypt as an excuse to turn on him, defeating him at the naval battle of Actium off the west coast of Greece in 31 BCE. Antony committed suicide and Cleopatra soon followed suit.

Now in complete charge of Rome, Octavius began to consolidate his power, carefully remaining within the



structural limitations of the Republic. He assumed power over Roman provinces, took the position of consul, and was given the title Augustus, a religious term that implied powers beyond that of mere mortals. Later he was declared *pater patriae*, or father of his country. Although he accepted the title *Imperator*, this signified only control over the army and was not the title of emperor often mistakenly associated with him.

Augustus, as he is generally known, moved to consolidate many of Julius Caesar's reforms. He settled thousands of veterans in the provinces, paying the owners of the land with treasure looted from Egypt. To forestall any moves by ambitious generals, he assumed and maintained a position as commander of all military forces. Although the Senate and other republican components of Roman government remained intact, Augustus was emperor in all but name.

After the upheavals of several civil wars, the Romans wanted peace and Augustus gave it to them. He granted significant autonomy to provincial governors, reformed the Roman economy and tax structure, and began a period of peace and prosperity known as the *Pax Romana*. He became extremely popular throughout the empire and many statues were erected in his honor. Though Augustus was skeptical of too much expansion of the empire, he did expand Roman influence into Central Europe and ended up adding more territory than any other Roman leader.

One of the most significant battles in history occurred during his reign. In 9 CE, the Roman governor Quinctilius Varus was ambushed in the Teutoburg forest in Germany and lost three legions. Unable to respond ad-

equately, Rome lost any chance of expanding into that region. The failure to expand Roman civilization into Germany, as it had been expanded into Gaul, has had profound implications to this day. Roman culture, law, government, and language dominated the development of the western part of Europe, while the Germanic



Drawing of Augustus Caesar from 1797.

portion of Europe developed along quite different lines, more heavily influenced by the “barbarians” of the east.

The Pax Romana ushered in a golden age for Rome that would last for two hundred years. This was the age of Rome’s greatest poet, Virgil (70–19 BCE), whose most famous work, the *Aeneid*, is both the story of the aftermath of the Trojan War and a treatise on the Roman Republic. Other important writers included Horace, Ovid, Pollio, and Livy. The period also saw many architectural triumphs, some of which survive to this day. The accomplishments of Augustus and of Rome during this period are almost without parallel.

Rule by one man has its drawbacks; the poet Ovid was exiled because his writing fell out of “imperial” favor, and the upper classes often felt that they were ignored. Nevertheless, Augustus ruled for forty-four years and died peacefully in 14 CE. In his will he counseled Rome against further expansion for fear that the empire would become unmanageable, a prophetic concern that would soon be borne out. Augustus was unable to name a direct descendant as his successor and finally settled on his stepson, Tiberius.

Although in his later years he became more dictatorial, Augustus was arguably the greatest of the Roman leaders. He presided over the expansion and consolidation of Roman civilization. He preserved and extended the reforms begun by Julius Caesar, expanded Rome’s borders to defensible positions in Central Europe, placed the army under his direct control, eliminating the possibility of popular generals seizing power, and began a period of peace and prosperity never again repeated in Roman history.

J. David Markham

See also Roman Empire

Further Reading

- Gruen, E. (1995). *The last generation of the Roman republic* (2nd ed.). Berkeley: University of California Press.
- Lewis, N., & Reinhold, M. (Eds.). (1990). *Roman civilization: Selected readings: Vol. 1, The republic and the Augustan age*. New York: Columbia University Press.

Plutarch. (1992). *The lives of noble Grecians and Romans*. New York: Modern Library.

Shuckburgh, E. S. (1995). *Augustus Caesar*. New York: Barnes and Noble.

Suetonius Tranquillus, G. (1989). *The twelve Caesars*. London: Penguin.

Syme, R. (2002). *The Roman revolution* (2nd ed.). Oxford: Oxford University Press.

Caesar, Julius

(100–44 BCE)

ROMAN GENERAL AND RULER

(Gaius) Julius Caesar’s extraordinary talents and ambitions allowed him to expand Roman control, promote domestic reforms, and become the leader of Rome.

Caesar was born to a patrician (noble) family at a time of great unrest. Civil war had broken out, and generals were gaining increasing power. While he undoubtedly received a classic Roman education from his father and, most likely, a tutor, very little is known of Caesar’s childhood and education. As a young nobleman, Caesar received religious and military training, and served in a number of military posts. He then entered politics and became a distinguished prosecutor. Caesar had a potentially disastrous conflict with the dictator Sulla. As Caesar was related to Sulla’s enemies, most notably Marius and Cinna (his father-in-law), Sulla required him to leave his wife as a condition of his safety. Caesar refused and went into hiding. He was eventually allowed to serve in the army in the east, where he continued to develop his political and military skills. After Sulla’s death in 78 BCE, Caesar practiced law in Rome, prosecuting prominent corrupt Romans and seeking out powerful friends. In 69 BCE he was elected to a one-year term as quaestor (assistant to the governor) in Spain, where his main duty was the administration of justice. This position also gained Caesar admission to the Senate.

Caesar, who had studied both Greek and Latin, was a broadly educated leader of great personal charm, and his oratorical and writing skills were recognized by Marcus Tullius Cicero, Rome’s greatest orator. Extravagant in his quest for influence, Caesar was heavily in debt but allied

himself with Marcus Licinius Crassus, the richest man in Rome, and Gnaeus Pompeius Magnus (Pompey), a popular general whose power and influence were on the rise. By 63 BCE, at age 37, Caesar's military successes, political activities—and bribes—led to his election as pontifex maximus, a powerful lifetime position as the high priest of the Senate. A year later he was appointed urban praetor, a prestigious administrative post. When his wife was rumored to be having an affair he divorced her, claiming that Caesar's wife must be above suspicion. In 61 BCE, Caesar was assigned to Spain as governor of the interior, where his numerous military victories earned him considerable wealth.

In 59 BCE, Caesar combined forces with Crassus and Pompey in the First Triumvirate, and was elected to the top administrative post of consul. He proceeded to institute popular reforms, such as land redistribution, over the opposition of Marcus Porcius Cato and the conservatives. Cato, perhaps Caesar's greatest opponent, and his allies promoted the prerogatives of the Senate and the preservation of the Republic. Cato opposed Caesar at every opportunity and, when Caesar's triumph was assured, committed suicide rather than be alive for Caesar to pardon.

The Senate gave Caesar control over Cisalpine Gaul (northern Italy), Illyricum (Albania) and Narbonese Gaul (southern France). From 58 to 49 BCE, Caesar conquered the rest of Gaul (France and Belgium), led two expeditionary invasions of Britain, and at Alesia (France) in 52 BCE defeated a combined Gallic army led by Vercingetorix. His expansion of Roman civilization west into Gaul instead of north into Germany began the dichotomy between central and western Europe that exists to this day. This westward expansion, reinforced by Roman defeat by the Germanic tribes in the Teutoburg Forest in 9 BCE led to the development of Roman culture, law and language in the west and a very different culture in the east. Caesar's written descriptions of the campaign in Gaul, and later of the Civil War, are considered some of the finest military prose ever written and were used to enhance his image in Rome.

Fearing his ambitions, Cato and his allies in Rome sought to deprive Caesar of his command. Caesar's

Caesar Meets Cicero

As a powerful general, Julius Caesar triumphed over the Roman senatorial party and drove their leader Pompey and most of the other party members from Rome in 49 BCE. In a letter written to his friend Atticus on 28 March 49 BCE, the Roman senator Cicero describes meeting up with Caesar, who clearly wanted influential people in his camp as he came into power.

... I spoke so as to gain Caesar's respect rather than his gratitude; and I persisted in my resolve not to go to Rome. We were mistaken in thinking he would be easy to manage. I have never seen anyone less easy. He kept on saying that my decision was a slur on him, and that others would be less likely to come, if I did not come. I pointed out that my case was very unlike theirs. After much talk he said, "Well, come and discuss peace." "On my own terms?" I asked. "Need I dictate to you?" said he. "Well," said I, "I shall contend that the Senate cannot sanction your invasion of Spain or your going with an army into Greece, and," I added, "I shall lament Pompey's fate." He replied, "That is not what I want." "So I fancied," said I: "but I do not want to be in Rome, because either I must say that and much else, on which I cannot keep silent, if I am present, or else I cannot come." The upshot was that I was to think over the matter, as Caesar suggested, with a view to closing our interview. I could not refuse. So we parted. I am confident then he has no liking for me. But I like myself, as I have not for a long time.

Source: Cicero. (1921). *Letters to Atticus* (E. O. Winstedt, Trans., Vol. 2, p. 255ff). Cambridge, MA: Harvard University Press.

efforts at compromise failed, and the Senate illegally demanded Caesar's return and gave Pompey control of the local legions. Caesar immediately left his headquarters at Ravenna and moved toward Rome. He crossed the Rubicon River, the border of his territory, famously proclaiming, "the die is cast," and the Civil War began. Pompey had the support of most of the Senate and nobility, but this support was only lukewarm, while Caesar was

popular with Rome's small middle class and, especially, with the common people, or plebs, and city and provincial leaders. Within six months he defeated Pompey's supporters in southern Gaul and Spain. Appointed dictator by the now acquiescent Senate, he undertook further economic reforms. In 48 BCE he crossed the Adriatic Sea to Greece and on 9 August defeated Pompey at Pharsalus. Pompey fled to Egypt, but Pharaoh Ptolemy XIII had him killed, hoping to gain favor with Caesar. Caesar, however, had an affair with Ptolemy's sister, Cleopatra, and established her as queen of Egypt. Further campaigns in Asia and Africa proved victorious, and Caesar triumphantly returned to Rome in 46 BCE.

In Rome, Caesar declared amnesty for those who had opposed him, instituted land and food reforms, such as grain and land distributions to the poor at public expense, took a census of Rome, and continued his program of building public works to provide both glory and jobs. He settled veterans and the unemployed in provincial cities, reducing Rome's excessive indigent population. He expanded Roman citizenship and reformed the tax system. The Senate voted him countless honors, but some feared Caesar wished to be king, his power as consul and dictator notwithstanding. He planned another eastern campaign, but on 15 March 44 BCE, the Ides of March, three days before he was to leave, Caesar was murdered by a number of Senators, including his friend Brutus.

Caesar bridged the gap between the Republic and the Empire. As he had predicted, a civil war followed his death, and his grandnephew Octavian (Gaius Octavius Augustus) became Augustus Caesar, the first Roman emperor, in 27 BCE. Julius Caesar's legacy includes his unquestioned abilities as a military commander and his reforms, including protections for Jews, which set the stage for an empire that would last five hundred years. His move toward a government dominated by one man stemmed the growing power of the generals and may have saved Rome as a unified empire. His name has become synonymous with ruler: the terms *Kaiser* and *Czar* are derivatives of Caesar. Other great leaders, such as Napoleon Bonaparte, sought to emulate his greatness, and Roman symbols were the inspiration for the styles of the French

and other empires. William Shakespeare, the greatest of the English-language playwrights, immortalized the glorified Julius Caesar in his play of the same name.

J. David Markham

See also Roman Empire

Further Reading

- Caesar, G. J. (1967). *The Civil War* (J. F. Gardner, Trans.). London: Penguin. Caesar, G. J. (1988). *The conquest of Gaul* (S. A. Hanford, Trans.). London: Penguin.
- Dando-Collins, S. (2002). *Caesar's legion: The epic saga of Julius Caesar's elite tenth legion and the armies of Rome*. New York: John Wiley.
- Gelzer, M. (1968). *Caesar: Politician and statesman*. Cambridge, MA: Harvard University Press.
- Grant, M. (1992). *Julius Caesar*. New York: M. Evans.
- Gruen, E. (1995). *The last generation of the Roman republic* (2nd ed.). Berkeley: University of California Press.
- Lewis, N., & Reinhold, M. (Eds.). (1990). *Roman civilization: Selected readings: Vol. I, The Republic and the Augustan age*. New York: Columbia University Press.
- Meier, C. (1982). *Caesar: A biography*. New York: Basic Books.
- Plutarch. (1992). *The lives of noble Grecians and Romans* (J. Dryden, Trans.). New York: Modern Library.
- Suetonius Tranquillus, G. (1989). *The twelve Caesars*. London: Penguin.

Capitalism

Although trade of goods and services is central in world history, capitalism is a relatively recent world phenomenon. Global trade, surplus production, and global consumerism helped spawn the global capitalism that dominates trade and international politics today. Capitalism, in turn, changed the distribution of power in world history.

Today most regional markets are tied to global markets. Surplus production is the goal of most state economies, and mediums of exchange like the European Union euro, the U.S. dollar, and the Japanese yen provide more individual economic choice around the globe than ever before. The experiences and lives of billions of people are changing in significant ways because of the economic model of capitalism.

The Capitalists will sell us the rope with which we will hang them. • VLADIMIR ILYICH LENIN (1870–1924)

Conceptualizing Capitalism

Economic historians suggest conflict, tradition, authority, and the market dictate access to and control of scarce resources. Capitalism is one historical model of access and control. Capitalism differs in degree rather than in kind from other economic systems in world history such as mercantilism. The Scottish philosopher Adam Smith, in his 1776 book *The Wealth of Nations*, first elaborated upon capitalism and its differences from other economic systems. He observed its emergence in the early modern period. Smith was influenced by the American and French revolutionary movements, which went against the economic model of the time, mercantilism. Mercantilism emphasized state access to and control of colonial resources for the benefit of the homeland, with little economic choice for individuals. Capitalism emerged as a blend of the revolutionary movement's emphasis on individual freedom and the failure of state-sanctioned economics in the form of mercantilism to address the needs and wants of private individuals and groups in a growing global consumer market. This historical context of capitalism is key to understanding its continuing spread and impact in world history.

Historical Overview of Economics and Capitalism

Nomadic trade before the emergence of villages was focused upon survival needs. Most nomadic people migrated to seasonal resource bases and let nature produce the surplus. Early village people stayed put and domesticated flora and fauna to produce surplus. They also became specialist producers like potters or farmers and needed to trade for survival items they did not make. Villagers also stored surplus for catastrophes and population increases. Markets emerged along with economic practices that were the precursors of modern trade. Early markets had supply and demand, surplus production, writing systems and mediums of exchange for efficiency, even individual choice and group control in economic decisions. Later, large-scale civilizations would build upon these basic market principles.

Most ancient, classical, and medieval economic systems were intertwined with their historic context. Common traits included collection and redistribution of surplus goods, usually foodstuffs, to even out subsistence resource access. Control of labor was also a common theme, usually in the form of peasant conscripts, slaves, and seasonal labor. Mediums of exchange like coins became common as well.

However, labor control was the key to surplus production. Villages, towns, and then cities became centers of trade and wealth. Their success was often based on trade. Names like Jericho, Ur, Athens, Teotihuacan, Constantinople, Xi'an, and Delhi are excellent world history examples. The state sanctioned markets and controlled resources like labor or taxes for monumental works, war, and production. Pyramids, ziggurats, grand canals, great walls, and grand expeditions resulted. State-controlled economic systems produced results. However, local village economics and interregional trade of elite goods were also present. Individuals could and did accumulate wealth along these trade routes. World history examples include the traders on the Silk Road, gold- and spice-carrying camel caravan leaders in West Africa and Southwest Asia, Viking trade voyage sponsors, and the *pochteca*, or Mesoamerican traders.

Economic thought followed these historic developments. Later classical thinkers on economics included Guan Zhong in China, in 700 BCE, and Aristotle in Europe, in 320 BCE. Late-medieval thinkers on economics included Abu Hamid Al-Ghazali in 1110 CE, Thomas Aquinas in 1273 CE, and Ibn Khaldun (c. 1377 CE). In their works, we see various components of capitalism but not modern capitalism itself.



A carpet dealer displaying his product outside his shop in Istanbul, Turkey.

Capitalism Emerges

Only in the early modern period (c. 1400–1700 CE) did the historical context exist for the emergence of global capitalism. Long-range, ocean-going technology with huge Chinese junks and durable Arabic dhows in the Indian Ocean, or Portuguese caravels and Spanish galleons in the Atlantic Ocean, brought new products to new markets. Eventually global markets linked regional economies by sea as never before. Arabic, Venetian, Iberian, and Chinese traders brought new products to emerging world ports. Enormous Chinese shipping expeditions in the fifteenth century CE visited East Africa and helped reshape Indian Ocean economies with porcelains, spices, and silks exchanged for African gold. Mughal India and the Americas produced large quantities of precious metals and gems that impacted global value systems and trade.

However, it was the Portuguese and Spanish seafaring ventures across the globe that first created global seafaring markets. The conquest of the Americas along with the establishment of trading centers in Africa, Asia, and the Pacific Realm led to an unprecedented exchange of foodstuffs, goods, human labor, disease, animals, and bullion called the Columbian Exchange. If there is one catalyst in world history for capitalism, this might well be it. Global consumerism was born.

The Spanish-Portuguese empire (united in 1580 CE) became the first land-and-sea global empire in world history. European markets and ships now began to dominate global trade based on the wealth and products of the Americas. Chiles were imported to India, corn to Africa, and Spanish silver became the currency of Europe and China. Cash crops like sugarcane and pineapples were now harvested around the globe, often with slave labor. European ships controlled the flow of trade and monopolized it. However, the Spanish empire functioned on an economic model of mercantilism, with the state controlling the wealth and financing state ventures. Spanish Habsburgs fought religious wars in Europe, fought the Ottoman Turkish empire around the globe, and even challenged the mightiest economy of all, China. Spanish “pieces of eight,” or silver bits, were mined by native labor in the Americas and become the global currency of

choice in areas like Europe and China. But state-run economies proved unable to handle the new, global trade. Spain went bankrupt four times in the early modern period, and lost much of its empire to the emerging, competing, seafaring nations of England, the Dutch Netherlands, and France.

Clearly, the issues of state debt and private economy coupled with peacetime and wartime economics were important variables to be overcome before modern capitalism could emerge. The English seafaring empire and global trade adapted to the global market by utilizing both public and private enterprise. The Dutch and Italian concept of banking houses with private issues of credit was coupled with stock markets and private companies. Private enterprise seemed to be a key component in the rise of English global power.

However, debt accrued in the competition for global trade dominance between England and France exposed the remaining vestiges of mercantilism in both nations’ economies. State-run economies simply did not address the growing private-enterprise market consumerism of people around the globe and had failed again to adequately fund global state competition. The Seven Years’ War, or French and Indian War, fought around the globe between 1756 and 1763 gave England global market dominance but left both the French and English states with huge debt that helped lead to the American and French revolutions. These revolutions were the backdrop for Adam Smith’s treatise *The Wealth of Nations*, with its implications for modern capitalism.

Industrialism and Capitalism

The competition for control of global trade made possible because of seafaring advances had created global markets and individual consumers. Products from across the globe became available and were even produced in any area of the world. State-run economic models had proven unable to function at a profit in this new market. However, people were still tied to production through labor, the only means of surplus production for trade on the market. A plateau had been reached. Industrialism in the

A Native American potter at San Juan Pueblo in New Mexico displays his pots for sale to the tourist market.

nineteenth century would free people up from this last chain that held back global capitalism.

Industrialism emerged first in England and France, the two empires competing for global dominance of trade. The use of machines and factory models of production freed up large populations from the land and created industrial production levels of surplus that flooded world markets. Textile industries in England and North America were prime examples as they came to dominate global textile markets in areas like the Congo, India, and Peru, where the European textiles had not previously been able to even compete with local, high-quality, handmade textiles. Gunpowder weapons, porcelains, and many other products became the exclusive market domain of European producers in the global market. Surplus production had finally transcended its ties to labor.

Capitalism Today

However, seafaring and industrialism don't fully account for European dominance in global markets. By 1900, even the mighty Chinese economy collapsed and Africa was divided up for economic purposes. Cultural beliefs and geography also played some role. Western civilization, with its historical experience and geographical context, was the primary center of emergence for global capitalism. Europe became the center of trade not because it was the center of the world, but because seafaring and its head start in capitalism made it the central trading place. However, so far in world history, capitalism has been unable to spread fully around the globe. Instead, blended economic systems have emerged.

In the twentieth century Latin American states have tried a variety of blended economic models that have not lasted. Mexico for instance, still has many regional and local markets that function on barter or money other than the Mexican peso, yet over 60 percent of its economic wealth is controlled by PEMEX, the state oil company. The experiment with communist models based on Marxian ideals in Russia and the Soviet Union failed to win its superiority in its Cold War competition with Western,



capitalist states. Socialist economic models have had mixed results in Europe to date with Nazi Germany at one end of the spectrum, modern France in the middle, and modern Norway at the other end.

In Asia, Africa, and the Pacific, rural populations still have village markets, while urban areas have global linkages and capitalistic markets, a situation exemplified by Singapore, Hong Kong, and Jakarta. Asian states like Korea and Japan have state-planned economies with huge companies like Hyundai and Mitsubishi working with the government to create cooperative rather than competitive production markets. Today, China is again in global markets with an experimental blend of state-sanctioned, but individually controlled, urban market zones. The interior still remains isolated from these experiments to date.

*Under capitalism man exploits man;
under socialism the reverse is true.* • UNKNOWN

In India and Africa, rural populations rise while resources decline. Labor is the only resource. Industrialism and surplus production may offer the only entry point for countries in Asia and Africa with skilled, inexpensive labor that can attract outsourced service and production industries from first-world economies. Even oil, the key resource of the industrial age today, does not alone guarantee the success of capitalism, as is evidenced in Nigeria and Chad. In the Middle East oil has added global economic linkages but not necessarily local populations into the global market. Saudi Arabia and Iran are examples.

Capitalism has proven to be a major shaper of world history and individual experience with its emphasis on freer markets, surplus, and a blend of state and private economic control. However, the influence of capitalism in world history has also been limited by factors such as scarce resources and local trade beliefs. Such factors have highlighted regional economic differences and have shifted the international balance of power in new directions. The struggles and successes of a growing European Union, China's capitalistic cities, and the North American Free Trade Agreement are three examples. Still the economic success stories of Japan and Ireland do suggest possible future avenues of growth for capitalism.

Chris Howell

See also Smith, Adam; World System Theory

Further Reading

- Allen, L. (1998). *Capitalism: A world history companion*. Santa Barbara, CA: ABC-CLIO.
- Braudel, F. (1986). *The perspective of the world: Civilization and capitalism, 15th–18th centuries*. New York: HarperCollins.
- Crosby, A. (2003). *The Columbian exchange: Biological and cultural consequences of 1492*. Westport, CT: Greenwood Press.
- De Soto, H. (2000). *The mystery of capital: Why capitalism triumphs in the West and fails everywhere else*. New York: Basic Books.
- Goldfrank, W. L. (Ed.). (1979). *The world-system of capitalism: Past and present*. London: Sage Publications.
- Greider, W. (1997). *One world ready or not: The manic logic of global capitalism*. New York: Simon and Schuster.
- Landes, D. S. (1999). *The wealth and poverty of nations: Why some are so rich and some so poor*. New York: Norton.
- Landreth, H., & Colander, D. C. (2002). *History of economic thought*. Boston: Houghton Mifflin.

- Parker, W. N. (1991). *Europe, America, and the wider world: Volume 2, America and the wider world: Essays on the economic history of Western capitalism*. Cambridge, UK: Cambridge University Press.
- Sen, A. (2000). *Development as freedom*. Garden City, NY: Anchor Press.
- Wolf, E. R. (1982). *Europe and the people without history*. Berkeley: University of California Press.
- Yergin, D., & Stanislaw, J. (2002). *The commanding heights: The battle for the world economy*. New York: Free Press.

Caravan

Throughout much of human history merchants who moved goods overland across long distances minimized their risks of loss to plunderers by traveling in caravans and carrying arms for protection. The merchants shared provisions and endured hardships, and their numbers provided them, at times, some degree of immunity from predation. Caravanners who passed from the domain of one political authority to another depended upon local authorities to secure their protection, and in return they paid transit fees, which might be offered in the idiom of tribute or gift giving. In traversing stateless areas, armed caravans could be as imposing as a small army. This practice of armed group travel, rooted in the elementary logic of safety in numbers, is ancient. References in early Chinese literature and in the Old Testament indicate the existence of the caravan during the first millennium BCE, and it may be even older.

The cost of transporting goods by land was generally higher than by sea or river, and thus caravans were mounted only in regions where these alternatives did not exist. In Africa north of the tropical forest and across Eurasia, merchants loaded their wares onto the backs of draft animals or in carts to be pulled by draft animals because the transport of goods by draft animal was less expensive than by human carriers. Across dry deserts such as the Gobi, the camel was the only pack animal that could survive the rigors of the crossing. In the intense cold of the Himalayan Mountains, the yak was the pack animal par excellence. Along the southern coast of the Sahara, the ox and the donkey were preferred.



The members of a caravan in the Middle East in the early twentieth century taking a rest.

Caravans were highly vulnerable to the elements, and merchants first and foremost had to take into account the physical needs of their draft animals. These needs could mean nighttime and early morning travel to avoid searing daytime temperatures when crossing the arid desert or travel during only the temperate months in order to avoid snow and ice. This type of travel could necessitate days of rest in order for the animals to recuperate from strenuous marches between watering points and to consume nutritious pasturage. With many uncertainties en route, caravanners developed organizational strategies to minimize their risks. They recognized the need for centralized decision making. Typically, they chose a caravan leader to handle diplomacy, arbitrate disputes, and manage logistics and a guide to negotiate the terrain. Individual caravanners generally traded on their own accounts.

The best-known and most-researched traditions of caravanning are those of Afro-Eurasia. The longest and oldest overland trade route in the world was the Silk Road, which stretched from China to the Byzantine empire. It was in use during the early years of the first millennium CE. The merchants of the Silk Road bought and sold along the length of the route, and their commerce was critically important to communities situated along it. Communities at various points along the Silk Road—

particularly in southwest Asia—maintained caravan rest houses, known as “caravanserai,” in order to encourage the commerce. The slow-moving, armed commercial markets were the principal arteries of cross-cultural communication between the distant Eurasian civilizations. Along the manifold routes and spurs of the Silk Road traveled ideas, goods, inventions, and techniques.

The caravan routes that stretched across the Sahara, dating from the first millennium CE, likewise played an important role in world history, linking the societies of northern Africa with those along the southern coast of the Sahara. By the beginning of the second millennium CE, along these desert routes, negotiable only by camel, flowed the knowledge of Islam and literacy, as well as ivory, gold, and large numbers of slaves.

Slave Labor

Beyond the Saharan and Central Asian basins, merchants also moved goods over great distances. In tropical Africa no indigenous beasts of burden existed, and the tsetse fly, the insect that carried sleeping sickness, killed off the domesticated draft animals of Eurasia that tried to penetrate the open woodlands and forests. Thus, caravans in tropical Africa were typically composed of long lines of human beings, rather than pack animals and carts, and

Sir Richard Burton on a Caravan

In his account from the mid-nineteenth century, British officer Sir Richard Burton describes the departure of a caravan organized by the Somali of what was then British Somaliland in North Africa.

EARLY on the 23rd December assembled the Caravan, which we were destined to escort across the Marar Prairie. Upon this neutral ground the Eesa, Berteri, and Habr Awal meet to rob and plunder unhappy travellers. The Somal shuddered at the sight of a wayfarer, who rushed into our encampment *in cuerpo*, having barely run away with his life. Not that our caravan carried much to lose,—a few hides and pots of clarified butter, to be exchanged for the Holcus grain of the Girhi cultivators,—still the smallest contributions are thankfully received by these plunderers. Our material consisted of four or five half-starved camels, about fifty donkeys with ears cropped as a mark, and their eternal accompaniments in Somali land, old women. The latter seemed to be selected for age, hideousness, and strength: all day they bore their babes smothered in hides upon their backs, and they carried heavy burdens apparently without fatigue.

Amongst them was a Bedouin widow, known by her “Wer,” a strip of the inner bark of a tree tied round the greasy fillet. We were accompanied by three Widads, provided with all the instruments of their

craft, and uncommonly tiresome companions. They recited Koran *à tort et à travers*: at every moment they proposed Fatihahs, the name of Allah was perpetually upon their lips, and they discussed questions of divinity, like Gil Blas and his friends, with a violence bordering upon frenzy. One of them was celebrated for his skill in the “Fal,” or Omens: he was constantly consulted by my companions, and informed them that we had nought to fear except from wild beasts. The prediction was a good hit: I must own, however, that it was not communicated to me before fulfilment.

At half past six A.M. we began our march over rough and rising ground, a network of thorns and water-courses, and presently entered a stony gap between two ranges of hills. On our right was a jagged hills, their sides black with the Saj and Somali pine, and their upper brows veiled with a thin growth of cactus. Beneath was a deep valley, in the midst of which ran a serpentine of shining waters, the gladdest spectacle we had yet witnessed: further in front, masses of hill rose abruptly from shady valleys, encircled on the far horizon by a straight blue line of ground, resembling a distant sea. Behind us glared the desert: we had now reached the outskirts of civilization, where man, abandoning his flocks and herds, settles, cultivates, and attends to the comforts of life.

slaves rather than free people were generally put to this labor. With human portage, transport costs (measured in food requirements for the laborers) were high, and consequently goods that had a low value-to-bulk ratio—such as grains or foodstuffs—generally were not transported even moderate distances.

Mesoamericans (people of the pre-Spanish culture area extending from Mexico to northern Central America) used a similar pattern of using slaves to carry goods. In the Andes Mountains, by contrast, goods of up to 45 kilograms in weight could be mounted upon the backs of llamas. During the sixteenth century the Old World draft animals established themselves in the New World and

came to bear the burden of long-distance overland transport where feasible.

Although the caravan has long been associated with long-distance trade, most caravanners likely took part in the regional exchange of goods and services. One pattern linked nomadic societies with sedentary societies around the Central Asian and Saharan basins. In the Sahara, for example, a larger percentage of caravanners transported Saharan salt into West African villages and on return brought back grain for consumption in the desert than ever engaged in long-distance trade across the Sahara. The same was true of the nomadic trade in animal products from the Central Asian steppe (a vast, usually level

and treeless tract) into China. A second pattern of caravan use was the relatively short-distance provisioning of urban centers with foodstuffs, such as in the massive system of ox-driven caravans that fed the city of Delhi, India, during the Mughal Empire.

Economic Pressure

Through the early modern centuries the increase in the volume of maritime trade and the coincident decline in per-unit transport costs put economic pressure on the overland trade routes. The caravan trade survived into the late nineteenth and early twentieth centuries only in interior regions where geographic isolation protected it from competition from the maritime sector. However, later during the twentieth century the caravan trade died off, outcompeted by the lower cost of transporting goods overland by truck or railroad. During the same period the nomadic world dramatically contracted in size and influence.

James L. A. Webb Jr.

See also Silk Roads; Trading Patterns, Trans-Saharan

Further Reading

- Austen, R. A. (1990). Marginalization, stagnation, and growth: The trans-Saharan caravan trade in the era of European expansion, 1500–1900. In J. D. Tracy (Ed.), *The rise of merchant empires, long distance trade in the early modern world 1350–1750* (pp. 311–350). Cambridge, UK: Cambridge University Press.
- Bulliet, R. W. (1975). *The camel and the wheel*. Cambridge, MA: Harvard University Press.
- Curtin, P. D. (1984). *Cross-cultural trade in world history*. Cambridge, UK: Cambridge University Press.
- Habib, I. (1990). Merchant communities in pre-colonial India. In J. D. Tracy (Ed.), *The rise of merchant empires, long distance trade in the early modern world 1350–1750* (pp. 371–399). Cambridge, UK: Cambridge University Press.
- Rossabi, M. (1990). The “decline” of the central Asian caravan trade. In J. D. Tracy (Ed.), *The rise of merchant empires, long distance trade in the early modern world 1350–1750* (pp. 351–370). Cambridge, UK: Cambridge University Press.
- Webb, J. L. A., Jr. (1995). *Desert frontier: Ecological and economic change along the western Sahel, 1600–1850*. Madison: University of Wisconsin Press.
- Wood, F. (2002). *The Silk Road: Two thousand years in the heart of Asia*. Berkeley and Los Angeles: University of California Press.

Carrying Capacity

Carrying capacity is the theoretical limit on the size of a population of any organism that a given environment of defined size can support indefinitely. The limit is usually stated in terms of the food supply, but density-dependent diseases have probably been the most important factor in limiting many animal and human populations through most of history. Other limiting factors may have included specific nutrients or water, or even physiological responses to the psychological stresses of high population density. The “law of the minimum” suggests that the limit will be set by whichever resource is in shortest supply or is activated at the lowest population density.

If food is the limiting resource, as is usually assumed, any population of food consumers is limited by the regenerative capacity of its food supply. If the consuming animal eats only the amount regenerated, (if, for example, wolves eat only as many sheep as are born each year, or the sheep eat grass only as fast as it can regenerate), the consumers and the food supply can theoretically coexist forever in equilibrium (unless the environment itself changes). The equilibrium may be static or may involve interrelated fluctuations in the size of the two populations, as when, for example, wolves deplete the sheep population and then decline in numbers themselves, which then permits the sheep to regenerate. If the consumer continues to eat more of its prey than the prey can regenerate, the population of prey and therefore of consumers will be reduced conceivably to extinction. Exceeding carrying capacity may result either in excessive mortality among consumers, in reduced fertility from malnutrition or disease, or in both. Density-related social dynamics among the consumers may also affect both mortality and fertility. The same principles apply to specific isolated human populations subsisting on limited resources (as in the Arctic or extreme deserts) where there

Travel is fatal to prejudice, bigotry, and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all one's lifetime. • MARK TWAIN (1835–1910)

is nowhere else to go, no alternative resources, limited ability to move food, and limited ability of the human group to enhance the growth of its resources.

Carrying Capacity as Applied to Human Beings

How important carrying capacity has been in human history is a matter of debate. A Malthusian perspective implies the importance of carrying capacity by arguing that human populations are—and by inference have been—limited by food-related technology that expands only through fortuitous human invention. Thomas Malthus (1766–1834) argued that the human population cannot expand indefinitely because it will inevitably outstrip its food supply. Humans will eat beyond Earth's technologically enhanced carrying capacity, with dire consequences.

Although Malthus may be right about the long-term future, he was clearly wrong about much of human history to date and for the near future. The carrying capacity concept clearly has not applied overall and in the long run to the growth of our species as a whole (although it has almost certainly applied locally and in the short run).

People are omnivores who eat an extraordinarily wide (and still expanding) range of foods. We respond to shortage by expanding the breadth of our diets. (Few human populations consume all of the edible resources within range until forced to do so by hunger.) We also can increase the range of environments we occupy, and we can move food from place to place. Most important, we have demonstrated an enormous capacity to increase food supplies by investing additional effort in obtaining and processing them.

A controversy exists about the relative importance of supply and demand as determinants of human food supplies in human history. Many scholars believe that Malthus profoundly underestimated the ability of growing populations themselves to force changes in food choices, technology, and related behaviors. Throughout history, the human population has made adjustments that have ultimately resulted in the adoption (more than invention) of new technology. If demand can push sup-

ply, the meaning of carrying capacity as a fixed limit must be questioned.

Evidence for the importance of economic demand in human history comes in many forms. New foods eaten have often been less palatable, less nutritious, and harder to obtain than those they supplemented—and therefore unlikely to have been adopted just because they had been discovered or new technology invented. Many new environments colonized were clearly not preferred (deserts, tropical rain forests, and the Arctic) and would not have been colonized voluntarily. Many new technologies or steps taken to improve food supplies resulted in declining quality of food or declining efficiency of food-getting techniques. Much of the history of evolving economies seems to have involved diminishing returns, particularly in the quality of human health and nutrition.

The Carrying Capacity for Foraging Peoples

Between 100,000 and about 12,000 years ago the human population consisted of foragers, small populations of whom survived into recent centuries and even into the present in forms modified by outside contact. These groups are mobile, live at low population density, and eat fresh wild foods. Malnutrition is quite rare among modern foragers and appears to have been rare among foragers in the past, but becomes increasingly important as populations grow and “progress” to new food resources and new technologies. Ancient and historic foragers also have been relatively disease-free, because low population densities and periodic movement prevent many infectious diseases from spreading or minimize their impact. The disease burden has clearly increased with increasing population density through human history. Major epidemic diseases such as smallpox are clearly of relatively modern origin. Modern peasants and the poor enjoy nowhere near foragers' standard of nutrition and health.

Various studies show that large game is among the highest quality and most easily exploited of resources when available. But large game occupies large territories and is depleted easily. Early human foragers' diets apparently included a relatively high proportion of large game;

Carrying Capacity and Time

This commentary by ecologist Garrett Hardin indicates how different perceptions of time by different groups of scientists influence perceptions of the concept of carrying capacity.

The concept of carrying capacity is a time-bound, posterity-oriented concept. This is one of the reasons that it threatens the “conventional wisdom” (Galbraith’s term) of the present time, which leans heavily on short term economic theory. The theory of discounting, using commercially realistic rates of interest, virtually writes off the future. The consequences

have been well described by Fife and Clark. Devotion to economic discounting in its present form is suicidal. How soon is it so? “In the long run,” an economist would say, since disaster is more than five years off. “In the short run,” according to biologists, since disaster occurs in much less than the million or so years that is the normal life expectancy of a species. Here we see a standing issue of dispute between economists and biologists, with their different professional biases reckoning time.

Source: Hardin, G. (1977). *Ethical Implications of Carrying Capacity*. Retrieved from dieoff.org/page96.htm

human hunters may have hunted many large mammals to extinction before falling back on secondary resources.

Early in prehistory population growth was extremely slow, absorbed mostly by territorial expansion. The slow growth probably resulted mostly from low fertility or birth control (since the life expectancy of such groups equaled that of later populations that grew much faster). As population densities increased, the role of infectious disease as a limit to populations increased. Malthusian constraints resulting from food shortages may also have been operating in specific times and places, but hunger and starvation may actually have increased in frequency and severity in later, non-foraging populations. Slow growth might also have been the result of population mechanisms geared not so much to the ultimate carrying capacity of natural resources as to the “carrying capacity” of choices defined by preferred labor inputs and food choices, or even of personal space.

As populations grew increasingly in the last 20,000 years, the territory available to each group declined, and large mammals became scarce, to the point where groups were ultimately forced to broaden their diets to include a wider range of more prolific resources (a wider range of vegetable foods, birds, small mammals, fish, and shellfish), resulting in an increase in the carrying capacity of each unit of land. But the new resources were apparently less desirable foods, less nutritious, and more difficult to exploit, thus commonly consumed only as preferred resources were exhausted. Our ancestors probably adopted, rather than invented, new technologies such as fish hooks, grind-

stones, and arrows suitable for exploiting smaller game that were obvious or long-known but unused until needed rather than being confined by the limits of fortuitous economic invention independent of need.

Wild small seeds, including cereals, were apparently very low on the list of preferred foods. They raise the carrying capacity of each unit of land but are not particularly nutritious and are very difficult to convert to food. (Even today, cereal grains and tubers are staples primarily for the poor, because they are plentiful and cheap.)

Carrying Capacity after the Adoption of Agriculture

Agriculture and the domestication of plants, first adopted about 10,000 years ago, are usually considered major inventions that further raised the productivity of land and permitted groups to become sedentary. They apparently resulted in a slight increase in the rate of population growth, probably not from increased life expectancy but from greater fertility and or altered birth control choices. But they, too, may have been a concession to increased population density. They clearly further lowered the quality of nutrition and may have increased labor demands.

On the one hand, sedentism and the ability to store food may have helped smooth out seasonal fluctuation and bottlenecks in the food supply; on the other, storage anchored populations to the vicinity of their stores, perhaps making those populations more vulnerable to crop failure, especially as domesticated crops modified for human use are often less suited to natural survival than



their wild ancestors and hence more vulnerable to disease and pests. The concept of storing foods restricted diets to storable resources, but stored foods lose nutrients during storage, and actual physical losses of stored food (due, for example, to spoilage) threatened the reliability of the whole enterprise. Reliance on stored resources also increased people's vulnerability to expropriation of stored resources by others, while sedentism also exposed populations to increased infection risks.

Common reconstructions hold that among established farmers, the invention of new tools or exploitation of new technologies—the hoe, the plow, draft animals, fertilizers, and irrigation—increased the carrying capacity of land and made labor more efficient. A more controversial thesis holds that methods of farming involving plentiful supplies of land and low population densities may have been more efficient than the more intensive methods associated with increased population density. Denser populations require increasing the productivity of land by shortening the periods of time that the land lies fallow, which in turn may necessitate the adoption of new tools. It is possible, therefore, that both before and after the adoption of agriculture, demand and labor investment, not technological “progress,” may have been the engine of economic growth. The idea of a fixed ceiling on resources modifiable only by fortuitous invention independent of need would then have little explanatory power.

Carrying Capacity in Recent Centuries

Artificial Malthusian constraints on population clearly became important with the emergence of civilization, because ruling classes (a defining feature of civilization) can withhold food from the lower classes and prevent them from generating demand for food. (Demand implies both desire or need *and* the ability to produce, pay for, or otherwise command food.) Hunger in the modern world among bountiful food supplies results from the inability of the poor to pay for food. Many argue that solutions to world hunger at present relate to the distribution of wealth, not natural Malthusian limits.

Moreover, in recent centuries, the growth of the world population has accelerated markedly. Nor can that growth be attributed to modern medicine's reducing human mortality, as it began well before the advent of modern medicine. Some argue that high growth rates are not a property of so-called primitive groups—that is, groups that depend on a high birth rate to assure their survival—but are a conscious response to the demands of colonial or world systems. If or when new efforts and new technology become necessary to feed the world's population, the implementation of those new technologies will depend on the degree to which the rich concern themselves with the poor. If that is the case, then increases in food technology are indeed independent of population and demand.

The Ultimate Human Carrying Capacity of Earth

In the long run, demographers generally estimate the ultimate carrying capacity of Earth at 10–70 billion people (although some estimates are much higher.) The modern world population is approximately 6 billion. The variation in those estimates is due in part to different assumptions about the ability and willingness of human populations to exert more effort, employ new technologies, eat new foods, and accept lower standards of living.

However, the human carrying capacity of Earth may well ultimately be measured not by food resources but by the limited supply of some other necessary resource. Fresh water is already in short supply, and that supply can be enhanced only at great cost. Carrying capacity might also be defined ultimately by the highest density that a human population can reach before it triggers an unstoppable epidemic of infectious disease—probably the most important limit on population for the foreseeable future. And it may well be defined by the limits of the capacity of social organization to mitigate social and psychological stresses brought on by declining personal space.

Mark Nathan Cohen

See also Population; Population Growth as Engine of History

Further Reading

- Birdsall, N., Kelley, K. C., & Sinding, S. W. (Eds.). (2001). *Population matters*. New York: Oxford University Press.
- Bogin, B. (2001). *The growth of humanity*. New York: Wiley-Liss.
- Boserup, E. (1965). *The conditions of agricultural growth*. Chicago: Aldine de Gruyter.
- Brown, L. R., Gardner, G., & Halweil, B. (1999). *Beyond Malthus*. New York: Norton.
- Cohen, J. E. (1995). *How many people can the earth support?* New York: Norton.
- Cohen, M. N. (1977). *The food crisis in prehistory*. New Haven, CT: Yale University Press.
- Cohen, M. N. (1984). Population growth, interpersonal conflict and organizational response in human history. In N. Choucri (Ed.), *Multidisciplinary perspectives on population and conflict* (pp. 27–58). Syracuse, NY: Syracuse University Press.
- Cohen, M. N. (1989). *Health and the rise of civilization*. New Haven, CT: Yale University Press.
- Ellison, P. (1991). Reproductive ecology and human fertility. In G. C. N. Mascie-Taylor & G. W. Lasker (Eds.), *Applications of biological anthropology to human affairs* (pp. 185–206). Cambridge, UK: Cambridge Studies In Biological Anthropology.
- Ellison P. (2000). *Reproductive ecology and human evolution*. New York: Aldine de Gruyter.
- Harris, R. M. G. (2001). *The history of human populations, 1*. New York: Praeger.
- Kiple, K. (Ed.). (1993). *The Cambridge world history of human disease*. Cambridge, UK: Cambridge University Press.
- Kiple, K., & Ornelas, K. C. (Eds.). (2000). *The Cambridge world history of food*. Cambridge, UK: Cambridge University Press.
- Livi-Bacci, M. (2001). *A concise history of human populations* (3rd ed). Malden, MA: Basil Blackwell.
- Malthus, T. (1985). *An essay on the principle of population*. New York: Penguin. (Original work published 1798)
- Russell, K. (1988). *After Eden: The behavioral ecology of early food production in the Near East and North Africa* (British Archaeological Reports International Series No. 39). Oxford, UK: British Archaeological Reports.
- Wood, J. (1995). *Demography of human reproduction*. New York: Aldine de Gruyter.
- World Watch Institute. (2003). *State of the world, 2003*. New York: Norton.

Cartography

Historians have used maps to portray the geographical patterns of the past for hundreds of years. Chinese historical cartography dates back at least to the Song dynasty. Europeans made historical maps of their Holy Lands, based on biblical sources, as early as the fourth century. The first historical atlas is sometimes attributed

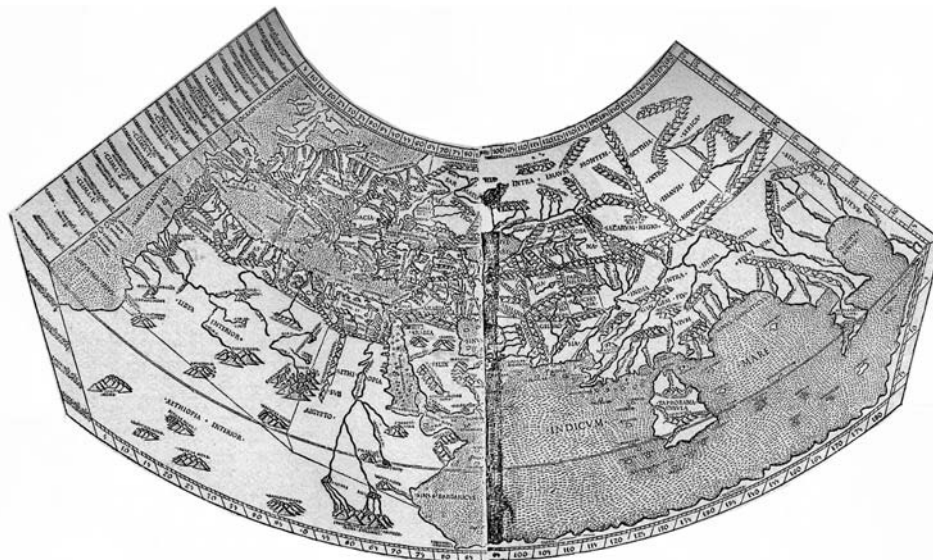
to Abraham Ortelius (1527–1598), who included sets of historically focused maps in the later editions of his *Theatrum Orbis Terrarum* (first published in 1570).

Such early exercises in historical mapping, however, were not conducted on the global scale that informs modern world history. Not only was the earth incompletely known, but the ethnocentric principle of geographic construction ensured that such projects focused on the cartographers' own homelands and, more generally, civilizations. Gradually, however, the mapping of historical patterns has become less parochial. The *DK Atlas of World History*, for example, published in 2000 by Dorling Kindersley, is at pains to take a global perspective and to avoid Eurocentrism.

Although the most inclusive use of cartography in world history is encountered in historical atlases, maps are deployed by world historians in a variety of other circumstances. All world history textbooks contain maps, as do many scholarly monographs that focus on world history. World history lends itself to mapping because it is by necessity geographical; world historians have to discuss a large array of different places, noting how they are both connected to, and differentiated from, one another. The most economical and elegant way to depict such spatial differentiation and integration is through cartography.

Essential Cartographic Concepts

A key cartographical concept is that of scale, the level of reduction from the actual space covered to its representation on paper. In a map scaled one to one million (at a ratio, in other words, of 1 to 1,000,000), a centimeter on the map represents a million centimeters on the earth. Counterintuitively, large-scale maps cover small areas while small-scale maps cover large areas. World historians typically employ small-scale maps, often operating at the global level of resolution. Most world historical atlases actually have a regional focus, interspersing maps of the entire planet among more numerous presentations scaled at the continental or subcontinental level. Several maps of early modern Europe, for example, may be followed first by portrayals of East Asia and then South Asia



Map 1. Ptolemy Map This map was created by the Alexandrian geographer, astronomer, and mathematician Claudius Ptolemy in the second century CE. It reflects the worldview of that time, with the known inhabited world shown extending mainly east to west and the Indian Ocean as an inland sea. The map was especially popular in the fifteenth century when it was reproduced several times and printed via moveable type.

during the same period and subsequently by depictions of global trade routes and imperial expansion.

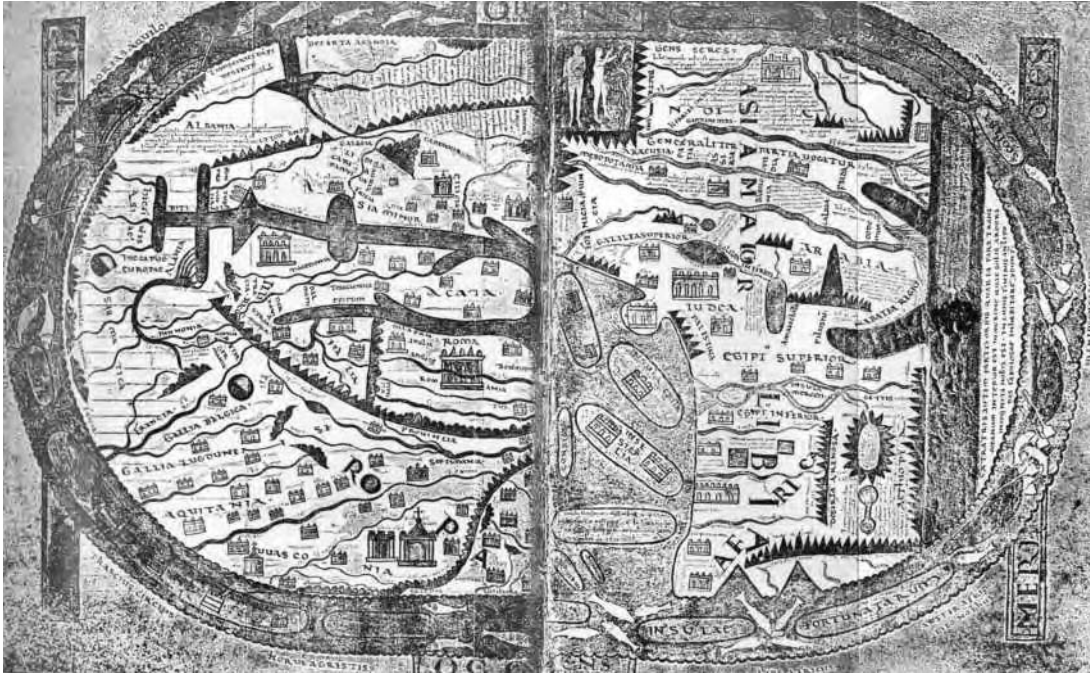
A second signal cartographic concept is that of projection. In projecting the curved surface of the earth on a flat sheet of paper, distortions—whether of shape, size, distance, or direction—necessarily result. Mathematical techniques have allowed cartographers to devise hundreds of different projections, each of which warps the image in its own particular way. Inadequate attention to the challenges posed by projection has led to poorly conceived historical maps. Many of these have used Gerardus Mercator's eponymous projection of 1569. Although invaluable for navigators (it is the only map projection on which a constant compass bearing can be plotted as a straight line), the Mercator projection grossly exaggerates the extent of high-latitude areas, such as Europe. As a result, critical scholars have argued that it serves in the end as a kind of visual propaganda for Eurocentrism.

Even the vantage point from which maps are constructed leads to necessarily skewed images of the world. In the typical equatorially oriented world map, for example, the oceans all appear to occupy discrete basins, whereas a map projection focused on the South Pole

reveals the broadly interconnected oceans as mere embayments of a global sea. Several recent world historical atlases experiment with multiple and novel map projections, both at the global and regional scales, allowing viewers to picture spatial relations in fresh and arresting ways. Such maps sometimes dispense with seemingly natural yet purely conventional cartographic protocols, such as situating north at the top of the page.

Distributional Maps and the Problem of Sovereignty

Historians use a wide variety of map types to illustrate the past. Simple locational maps are often employed to indicate the positions of places mentioned in the text. More complex versions of this sort of map add topography and other natural features. In the *Barrington Atlas of the Greek and Roman World* (2000), detailed physical maps, containing a large array of precisely located place names, depict the landscapes of antiquity, much as one would find in an atlas of the present-day world. More often, however, the maps employed by world historians reveal the distributional patterns of specific phenomena. The most commonly depicted patterns are those of polit-



Map 2. Mappa-Monde of St. Sever The Mappa-Monde of St. Sever was created between c. 780 and 980 and is an example of an early Christian map of the world. East is at the top of the map with Europe to the left and Africa to the right.

ical geography, bounding the territories of kingdoms, empires, and other polities of the past. Historically minded cartographers also map the spatial configurations of religious adherence, economic organization, population density, and many other aspects of social life. Less often encountered in world history are thematic maps that depict statistical variations of particular phenomena over space, since gathering the requisite quantitative data over large areas for earlier times is difficult at best.

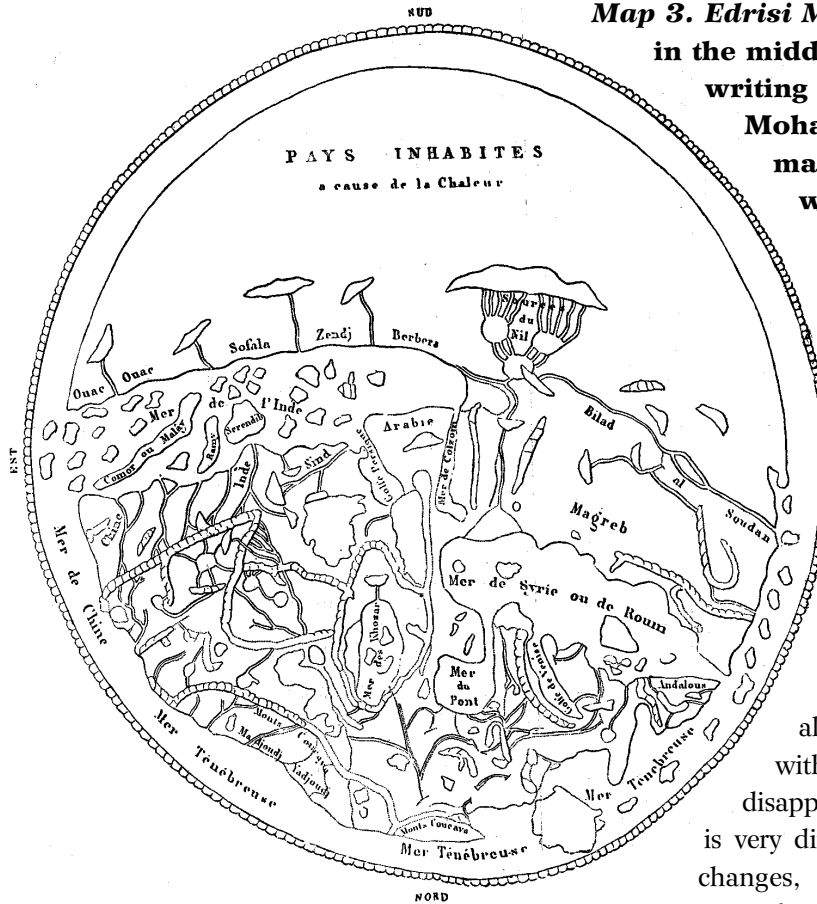
The common focus on political organization reveals one of the most intractable problems in historical mapping: that of projecting the geographical patterns of the present onto the past. Almost all atlases of world history are dominated by maps depicting, with bright colors, neatly bounded polities, much like those found in political maps of the modern world. Before the nineteenth century, however, few states were in fact clearly bounded in space. Most were characterized by a gradual diminution of sovereignty with distance from core areas. Instead of clean borders, one would have found broad frontiers of ambiguous, or overlapping, political affiliation. A related difficulty, most glaringly apparent in the case of early modern European empires, is that of hypothetical

sovereignty. Spain, for example, did indeed claim control over vast expanses of North America in the late eighteenth century, as is reflected in most maps depicting that period. In practice, however, the Spanish monarchy exercised power over only a few minor outposts in those vast territories located in what is now the United States.

Unfortunately, it is difficult to depict the complex spatial patterns of sovereignty that characterized the pre-modern world. The black-and-white maps to which most authors are limited are almost never adequate, and even the full color maps of world history atlases seldom prove equal to the task. Only regionally focused historical atlases, such as Joseph Schwartzberg's exemplary *A Historical Atlas of South Asia* (1993), allow the concerted attention to detail that is needed to address this thorny issue.

Mapping Dynamic Patterns

Political-historical maps, however they are drafted, primarily depict differences among places. If such spatial differentiation is one of the fundamental aspects of geography, the other is spatial integration, or the connections that bind places together. World historians are increasingly interested in this latter, more process-oriented, form of



Map 3. Edrisi Map This map was reconstructed in the middle of the twelfth century from the writing of Muslim geographer Abu Abdullah Mohammed ibn al-Sharif al-Idrisi. Like many Islamic maps of the period, it was based on the ideas of Ptolemy (see Map 1) combined with Arab knowledge of the world gained through travel and expansion.

change within a single representation. In regard to political mapping, this is most easily done for polities that exhibited prolonged expansion. The growth of the Roman or Ottoman empires, for example, can fairly easily be shown by using different colors or shades to represent territorial accretions made during particular periods. One can also map contraction in much the same way, as with the often-mapped diminution and eventual disappearance of Poland in the eighteenth century. It is very difficult, however, to show complex territorial changes, exhibiting episodes of both growth and retrenchment, on a single rendering. Maps of this sort tend to be so complex that they can be more confusing than edifying.

Political Implications and Motivations

Like other forms of mapping, historical cartography is often influenced, consciously or not, by ideological commitments. Maps necessarily demand the exclusion of information (a totally comprehensive map, it has often been remarked, would have to be constructed at a 1 to 1 scale, rendering it useless). What the cartographer chooses to portray depends on what he or she considers important, which in turn is influenced by his or her political outlook. A left-leaning scholar, for example, might be more inclined to map peasant rebellions than a right-leaning scholar, who in turn might be more concerned with great-power politics. Political sea changes in academia have thus influenced our cartographical portrayals of the past; maps of rural insurrections, for example, are much more common today than they were in earlier generations.

representation. Rather than stressing boundaries, maps of integration typically portray routes, often depicted by arrows. The routes in question may be trade circuits, lines of diffusion (whether of innovations or diseases), migration pathways, courses of exploration, or paths of invasion; roads, canals, and shipping routes are often prominently displayed. Such maps are often dynamic in orientation, illustrating movement over time. A wide variety of hybrid maps, such as those overlaying trade routes across politically marked territories, are also commonly used.

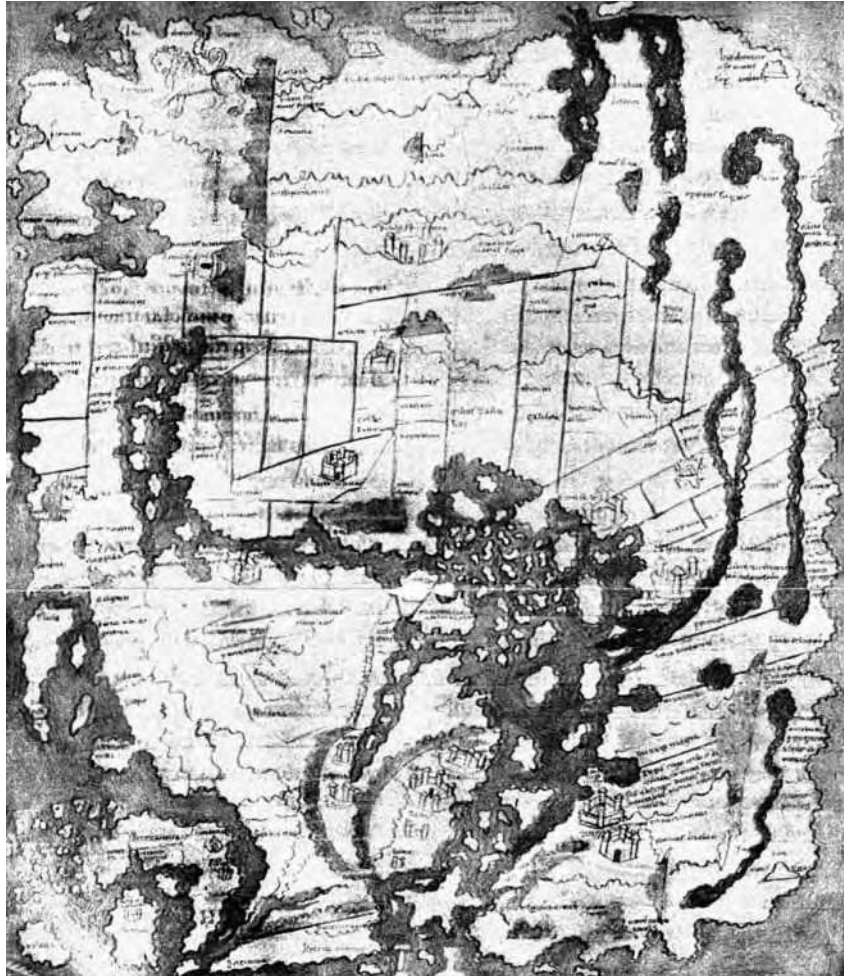
In the final analysis, all cartographic representations of the past are at least implicitly designed to suggest change over time. To be sure, most maps found in world history texts and atlases present snap-shots, illustrating conditions as they supposedly existed at a particular date. A sense of dynamism can be gained, however, by comparing maps depicting conditions in one period with maps of the same area in earlier or later periods. More ambitious cartography attempts to incorporate historical

Map 4. Anglo-Saxon Map
This is perhaps the most accurate map produced before the thirteenth century by Christian Europe. It was drawn near the close of the tenth century and shows considerable attention to detail.

Nationalist ideology, coupled with devotion to one's own "civilization," has also profoundly shaped the construction of global historical maps. World history atlases produced in Germany, for example, contain more portrayals of Germany and of Europe than those produced in Japan, which, correspondingly, focus more on Japan and East Asia. The academic development of world history as a discrete field of study over the past several decades has, however, countered such parochialism, nurturing instead a globalist vision.

But regardless of such recent progress, cartography has often been put to clearly nationalistic purposes in the past. In Nazi Germany, for example, mapmakers strove to magnify the extent of the German Reich during various historical epochs. At the extreme of politicization one finds propaganda maps, such as the early Nazi productions that depicted Czechoslovakia as a fist striking into the heart of the German geographical body. Today it is not uncommon to find anachronistic political maps of the present-day world that show, without acknowledgement, territorial dreams rather than realities. National maps made in India and Pakistan, for example, usually append all of Jammu and Kashmir to their respective national territories, rather than merely those portions of the region that they actually control.

The use of mapping for such nationalistic and imperialistic purposes has led some scholars to conclude that cartography, whether depicting the past or the present, is primarily a projection of power. Although this thesis is probably exaggerated, matters of state power do infuse



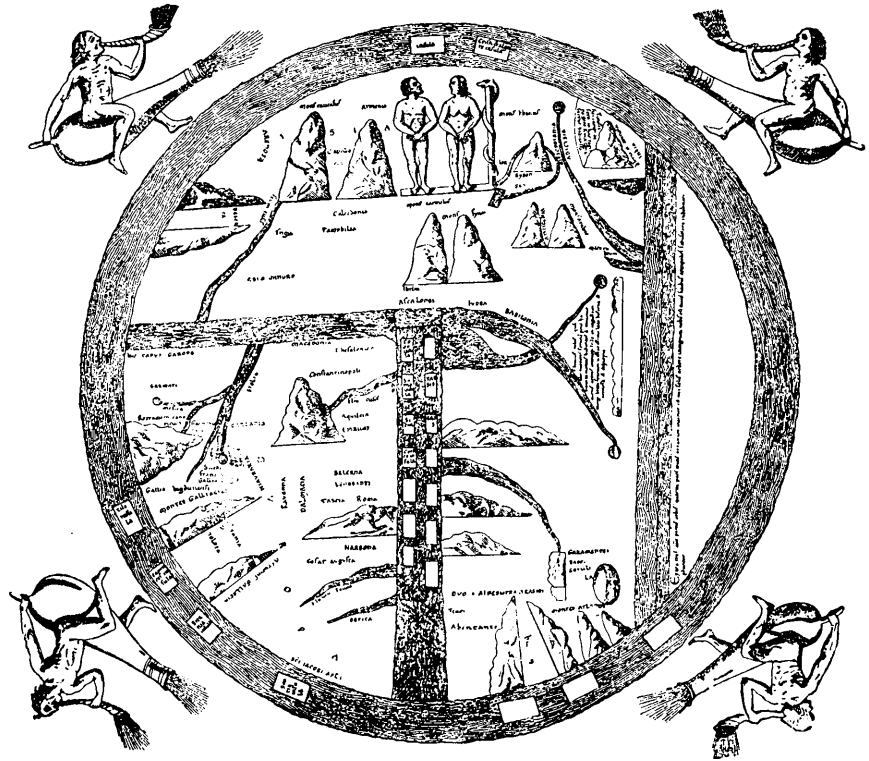
many mapping projects. National atlases, for example, emerged as important sites in which to illustrate the themes of national unity, diversity, and historical cohesion. But if the national polities take advantage of maps for their nation-building agendas, so too, in recent times, do members of various small-scale societies, who have learned to employ modern cartographic techniques to define and defend their own historically constituted homelands against encroachment by private interests and state power. Cartography is thus perhaps best seen as a flexible methodology that can serve almost any purpose.

Historical Maps in World History

World historians can use any source of spatial information in order to construct maps. Certain records of the past, however, prove particularly useful. Gazetteers, a genre that was traditionally highly developed in East Asia, organize

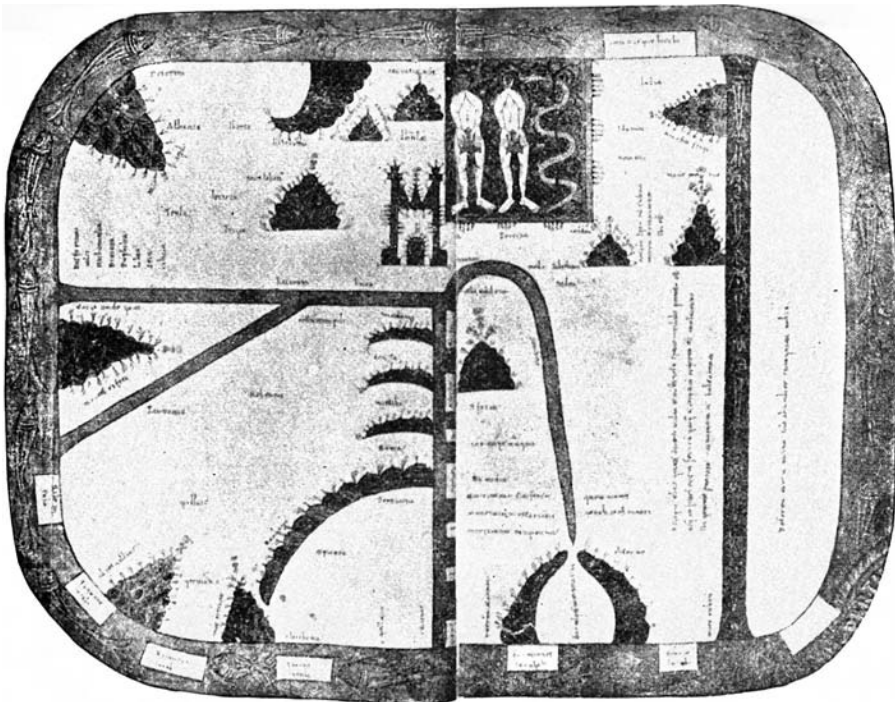
Map 5. The Turin Map of the Eleventh Century

This old and simple Christian map of the world with Adam, Eve and the serpent shown at the top, gives special attention to physical features including mountains, rivers, and winds.



Map 6. The Spanish-Arabic Map of 1109

The original is brightly colored and represents Christian and Muslim ideas about the world. It is noticeable for being cruder than earlier maps, with the earth depicted as square and surrounded by water.



data in an explicitly geographical framework and hence lend themselves to cartographic presentation. Equally valuable are actual maps made in earlier periods. By examining historical maps, scholars can determine the spatial knowledge that was available and the geographical conceptions that were prevalent in the period under consideration.

Perhaps the most innovative use of historical cartography in a work of world history is Thongchai Winichakul's *Siam Mapped* (1993). While Thongchai's focus is Thailand (formerly Siam), his frame is necessarily global in that he is concerned with Thailand's maintenance of independence and its construction of a modern state in the face of French and British imperial aggression. Mapping, he argues, was central to this project. The Thai government had to delineate precise boundaries in areas that had previously been ambiguous frontier zones, just as it had to thoroughly map its own internal districts in order to administer them in the modern style. To understand this crucial episode in both Thai and world history, Thongchai found that it was necessary to examine in detail both early maps and their cartographic production techniques.

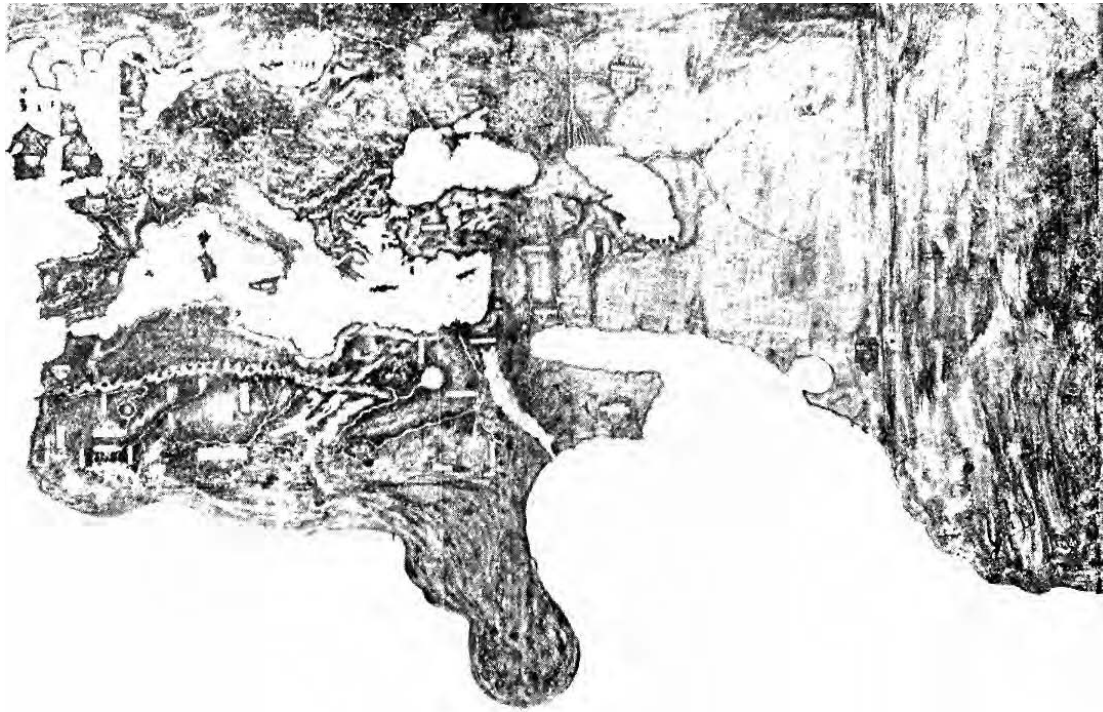
New Cartographic Techniques

During the twentieth and early twenty-first centuries, advances in cartographic methods have allowed mapmakers to create ever more exact and flexible depictions of the earth's surface. Although historical cartography has hardly been at the forefront of these technological developments, world historians have put them to good use. Aerial photography was harnessed to the mapmaking effort in the early twentieth century, to be followed at mid-century by satellite imagery. The late twentieth century saw the development of a host of computer-aided techniques for both making and comparing maps. Novel map forms, such as the cartogram (in which the size of different areas varies in proportion to some measurable feature, such as population) could now be easily generated with the proper software. The same is true, moreover, in regard to unusual map projections. But the most



Map 7. The Psalter Map of the Thirteenth Century This map is a good example of the circular world maps of Medieval Europe. Much attention is given in many of these maps to Christian themes and the telling of legends. Christ is at the top and Jerusalem in the center.

significant cartographic advance of the late twentieth century was the development of Geographic Information Systems (GIS). GIS weds mapping to computerized databases, allowing the ready construction of a large number of map overlays. GIS is particularly relevant for world historical projects focused on the nineteenth and twentieth centuries, when many forms of quantitative data that can be digitized become available. A related technique is animated cartography. Animated cartography makes it possible to portray changes in distributional patterns over time as continuous transformations, much as is done in conventional animation. Animations of the spatial extension of a single phenomenon, such as the spread of Islam during and after the seventh century, are a particularly effective form of world historical pedagogy.



Map 8. The Laurentian Portolano of 1351 This Italian map is notable for its accuracy, not just of Europe but also of Africa and Asia. Its depiction of Africa was by far the most accurate of any European map up to that time.

Cartography, in both its traditional and technologically mediated forms, is a powerful tool for portraying and analyzing world historical patterns and processes. If anything, world historians have underutilized mapping and other forms of graphical presentation in favor of textual approaches. By further linking the techniques and concerns of geography with those of history, a richer and more sophisticated understanding of global historical development may someday be gained.

Martin Lewis

See also Henry the Navigator; World Maps, Chinese

Further Reading

- Barraclough, G., & Parker, G. (1993). *The Times atlas of world history*. Maplewood, NJ: Hammond.
- Black, J. (1997). *Maps and history: Constructing images of the past*. New Haven, CT: Yale University Press.
- Black, J. (Ed.). (2000). *DK atlas of world history*. London: Dorling Kindersley.
- Brotton, J. (1997). *Trading territories: Mapping the early modern world*. Ithaca, NY: Cornell University Press.
- Goffart, W. (2003). *Historical atlases: The first three hundred years, 1570–1870*. Chicago: University of Chicago Press.
- Gregory, I. B. (2002). *A place in history: A guide to using GIS in historical research*. Oxford, UK: Oxbow Books.
- Harley, J. B., & Laxton, P. (2002). *The new nature of maps: Essays in the history of cartography*. Baltimore: Johns Hopkins University Press.
- Herb, G. (1996). *Under the map of Germany: Nationalism and propaganda, 1918–1945*. London: Routledge.
- Kinder, H., & Hilgemann, W. (1974). *The Anchor atlas of world history*. New York: Anchor.
- Kraak, M., & Brown, A. (2000). *Web cartography*. London: Taylor & Francis.
- MacEachren, A. M. (1995). *How maps work: Representation, visualization, and design*. New York: Guilford.
- Monmonier, M. (1993). *Mapping it out: Expository cartography for the humanities and social sciences*. Chicago: University of Chicago Press.
- O'Brien, P. K. (1999). *Atlas of world history*. Oxford, UK: Oxford University Press.
- Peterson, M. P. (1995). *Interactive and animated cartography*. Englewood Cliffs, NJ: Prentice-Hall.
- Schwartzberg, J. E. (1993). *A historical atlas of South Asia*. Oxford, UK: Oxford University Press.
- Snyder, J. P. (1993). *Flattening the earth: Two thousand years of map projections*. Chicago: University of Chicago Press.
- Talbert, R. J. A. (2000). *Barrington atlas of the Greek and Roman world*. Princeton, NJ: Princeton University Press.
- Thongchai, W. (1994). *Siam mapped: A history of the geo-body of a nation*. Honolulu: University of Hawaii press.
- Vidal-Naquet, P. (Ed.). (1987). *The Harper atlas of world history*. New York: Harper & Row.
- Woodward, D., & Harley, J. B. (1987–). *The history of cartography*. Chicago: University of Chicago Press.

Catherine the Great

(1729–1796)

EMPERESS OF RUSSIA

Catherine II, also called Catherine the Great, a German princess who married into the Russian royal family, is one of most important leaders in Russia's history. She is well known in the Western world because of her extremely active extramarital love life and because she is speculated to have taken over Russia's throne by killing her husband, Peter III (1728–1762). During her thirty-four-year reign (1762–1796), Catherine the Great ruled as the most powerful and important autocrat in Russia since Peter the Great (1672–1725).

Sophie Friederike Auguste von Anhalt-Zerbst, later Catherine the Great, was born in 1729 to two minor German royals who had no real power or fame. As Sophie grew up, she exhibited a great intelligence. She had a strong tendency toward rational thinking and frequently enraged her tutor by trying to find logical explanations for sacred dogmas. Later, this way of thinking manifested itself in Catherine's passion for Enlightenment philosophy.

In 1744, Sophie's life changed forever when she was invited to St. Petersburg by Empress Elizabeth (1709–1762), who reigned as Russia's czar from 1741–1762, to meet Karl Peter Ulrich, later Peter III, the heir to Russia's throne. Upon meeting Sophie, the empress discovered many excellent reasons to choose her for Peter's bride. Because Sophie's family was so obscure, the empress thought that Sophie would easily renounce her German allegiance. In addition, Sophie was Protestant, and therefore thought to be more willing to convert to the Russian Orthodox faith. True to the empress's supposition, Sophie willingly converted to Russian Orthodoxy and was given the new name Yekaterina (Catherine) Alekseyevna.

In 1745, Catherine married Peter III. Peter III had grown up in Germany and considered himself to be German in every respect. He had an intense dislike for all

things Russian. He also hated his wife who, although of German blood, considered herself to be Russian. Catherine, in return, hated her husband. They had one child, Paul (1754–1801), who was raised entirely by Empress Elizabeth. With no real purpose at home or at court, Catherine became restless. So, she began to take extramarital lovers. There is even some debate as to whether Peter III was Paul's biological father.

On 25 December 1761, Empress Elizabeth died and Peter III was crowned czar. Quickly, he lost favor with his subjects. Upon coming to power, Peter spoke mostly German. He made horrible jokes about Russians. He even changed the Russian army's uniform to look more German. The worst of Peter's early actions, however, came in 1762. Before her death, Empress Elizabeth had been fighting a war with Prussia and, after her death, Russia finally won. Peter III signed a treaty restoring power to the king of Prussia. This stolen victory cemented Peter III's unpopularity with the Russian people.

On 28 June 1762, Catherine initiated an instant, bloodless, and popular coup d'état. Peter, who did not try to resist, was captured and placed under house arrest. Several days later, he was mysteriously assassinated. Catherine denied complicity. There are a plethora of theories about the circumstances under which the deposed czar was murdered. One speculation is that Peter's guards strangled him to death. Another hypothesis is that Catherine's lover killed him on Catherine's orders. Although the truth is not known, those closest to Catherine held that when Catherine received the news of her husband's death, she fainted. She later said, "My reputation is ruined! Never will posterity forgive me for this involuntary crime" (Troyat 1980, 137). Catherine was not remotely sad about her husband's death; she was merely nervous about its repercussions on her political career. Publicly, the czar was said to have died of natural causes. Not one person disputed this claim.

When Catherine II came to power, she made it abundantly clear that she would not give up the throne to her son when he came of age. Catherine's first real success was in foreign policy utilizing the Russian-Prussian alliance. In 1763, King Augustus III (1696–1763) of

I shall be an autocrat, that's my trade; and the good Lord will forgive me, that's his. • CATHERINE THE GREAT (1729–1796)

Poland died. The Russian-Prussian alliance backed the election of Catherine's former lover, Stanislaw II Augustus Poniatowski (1732–1798) to replace him. Because he had no royal ties, Poniatowski remained loyal to his Russian backers. This was a brilliant foreign policy move on Catherine's part. The first of three partitions of Poland had occurred. The second partition occurred in 1793. In 1795, the final Polish partition took place and Poland ceased to exist. Catherine had additional military victories in Turkey, where she led two successful wars in 1768–1774 and in 1787–1791. Those wars, in conjunction with the annexation of the Crimea in 1783, effectively removed the Tartar threat to Russian security and established Russian control over the northern coast of the Black Sea.

Catherine also initiated many influential domestic policies. She improved the dismal situation of women when, in 1783, she put Princess Dashkova (1744–1810) in charge of the Academy of Arts and Sciences. Princess Dashkova was the first woman who was not a part of the royal family to hold any position of power in Russia. In addition, Catherine opened up the first schools for women.

Catherine's main goal for Russia was to reorder and systemize its class structure. To that end, Catherine set out the 1785 Charter of the Towns, which stated that the more wealthy the individual, the more rights that individual would be granted. On the same day, she put out the Charter of the Nobility, which granted various freedoms to the nobility, including freedom from corporal punishment. While Catherine gave a great deal of rights and freedoms to the nobility, she did not free the serfs. About 90 percent of Russia's peasant class was serfs and, while Catherine was against serfdom, she did not abolish it. Catherine knew that the nobles would stop at nothing, including killing the czar, to prevent the end of serfdom.

On 6 November 1796, Catherine died and was succeeded by her son, Paul I. Throughout Catherine's life there had been a deep hatred between mother and son. When Paul came to power, his goal was to exact revenge on his mother. He did this with his Law of Succession, which eliminated the possibility of any woman ever rul-

ing Russia again. Catherine the Great, therefore, was truly the first and last of her kind, a unique leader in both Russian and world history.

Lori Feldstein

See also Russian-Soviet Empire

Further Reading

- Alexander, J. T. (1989). *Catherine the Great: Life and legend*. New York: Oxford University Press.
- Anthony, K. (1925). *Catherine the Great*. Garden City, NY: Garden City Publishing Company.
- Cowles, V. (1971). *The Romanovs*. New York: Harper & Row.
- De Madariaga, I. (1990). *Catherine the Great: A short history*. New Haven, CT: Yale University Press.
- Dixon, S. (2001). *Catherine the Great*. Harlow, UK: Longman.
- Dmytryshyn, B. (1974). *Modernization of Russia under Peter I and Catherine II*. New York: John Wiley & Sons.
- Gooch, G. P. (1966). *Catherine the Great and other studies*. Hamden, CT: Archon.
- Gribble, F. (1942). *The comedy of Catherine the Great*. New York: E. P. Dutton.
- Haslip, J. (1977). *Catherine the Great: A biography*. New York: G. P. Putnam's Sons.
- Kaus, G. (1935). *Catherine: The portrait of an empress*. New York: Viking.
- Masson, C. (1970). *Secret memoirs of the court of Petersburg* (2nd ed.). New York: Arno.
- Thomson, G. S. (1950). *Catherine the Great and the expansion of Russia*. London: English Universities Press.
- Troyat, H. (1980). *Catherine the Great*. New York: Meridian.
- Waliszewski, K. (1905). *The romance of an empress*. New York: D. Appleton.

Catholicism, Roman

Roman Catholicism is the religion that traces its origins to Jesus Christ of Nazareth (born between 6 BCE and 6 CE and died between 28 CE and 30 CE) and regards the bishop of Rome as the successor of Peter and the visible head of the Church. Jesus is worshipped as the Son of God and the Second Person of the Blessed Trinity. More than any other religion, Roman Catholicism has shaped the development of Western civilization. Found today in 235 countries, the Roman Catholic Church is

the largest of the Christian churches, with a world population of about 1,092,253,000, or 17 percent of the world's population. The largest number of adherents is found in Latin America and Europe. In the United States Roman Catholics comprise 23 percent of the population and constitute the largest religious body. This article is concerned only with the Roman (or Latin) branch and is divided into four sections: basic teachings, major historical developments, contemporary trends and problems, and Roman Catholicism in the non-European world.

Basic Teachings

The teachings of Roman Catholicism rest upon Scripture (revelation as found in the Old Testament and New Testament), tradition, and the *magisterium*, the teaching authority of the Church. Tradition has enabled the Church to adapt to new realities. It is closely linked to Scripture, and the interpretation of both is considered the prerogative of the magisterium. The expression of the revealed truth in Scripture may take diverse forms, such as history, prophecy, parable, and allegory. A literal interpretation is not required. Throughout the Christian era, reformulation and adaptation have been characteristic of Roman Catholicism in moral teachings, liturgy, and societal roles. The process has involved change and continuity, conflict and consensus.

The distinctive marks of Roman Catholicism are unity, holiness, catholicity, and apostolicity. Unity means that each individual transcends all cultures and classes; holiness signifies that the Church is intrinsically sacred despite the sins of its members, either individually or as a body; catholicity is the universality of the Church; and apostolicity denotes faith, ministry, and the sacraments in communion with Rome. The Roman Catholic Church recognizes elements of itself in other Christian churches, and it does not require that a state be Catholic or that it enjoy any privileged status. It accepts the principle of religious freedom, and it holds that salvation is possible for all who act in good faith, according to their consciences.

There is a definite hierarchy in the Roman Catholic Church. As the successor of the apostle Peter, the supreme ruler is the Pope. Elected by the College of Cardinals

When and Where World Religions Began

4000–2500 BCE	Hinduism	South Asia
1300–1200 BCE	Judaism	West Asia
500–400 BCE	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400–221 BCE	Daoism	China
1ST CENTURY CE	Christianity	West Asia, Europe
3RD CENTURY CE	Manichaeism	West Asia
6TH CENTURY CE	Shinto	Japan
7TH CENTURY CE	Islam	West Asia
11TH CENTURY	Orthodoxy	West Asia
15TH–16TH CENTURY	Sikhism	South Asia
16TH CENTURY	Protestantism	Europe
19TH CENTURY	Latter-day Saints	North America
	Babi and Baha'i	West Asia
19TH–20TH CENTURY	Pentecostalism	North America

since the Middle Ages, the Pope resides in Vatican City, a minute but sovereign state in the center of Rome. The other bishops are also seen as the direct successors of the apostles, and most reside in geographical and organizational units known as dioceses. The Pope and the bishops are joined together in a collegial body, but collegiality does not lessen the papal primacy or affect papal infallibility in matters of faith and morals.

Just as the Pope has primacy over the bishops, the bishops have the final authority in their respective dioceses. After ascertaining their orthodoxy, a bishop ordains priests and deacons, who become his assistants. Priests must be male, and since the fourth century, enter upon a lifetime of celibacy. Deacons, also male, may be married. Most priests reside in ecclesiastical units called parishes. In addition to bishops, priests, and deacons there are monks and nuns who are members of religious

Missionaries in China

Father Matthew Ricci was a leading Jesuit missionary, working in China from 1583 until 1610. He won the respect of Chinese intellectuals with his keen mind and command of the Chinese language. In the extract below, one of Father Ricci's coworkers describes the aftermath of a debate with Chinese scholars about whether God was infinitely good (the position Ricci argued).

There were other subjects discussed at this dinner and when it was over, the temple minister was the only one who would not admit that he was vanquished, though all the others agreed that he was. They were so pleased with Father Matthew's presentation of his side of the question that they carried on the discussion of the same subjects at their meetings for months afterwards . . .

After the debate at the banquet, some of the disciples of the host became frequent callers on Father Ricci and soon put aside their pantheistic ideas. In order to help others to correct this fallacy, he wrote a treatise on that particular question, and inserted it as a separate chapter in his catechism. When this commentary was read by one of the disciples of the banquet host, he remarked that anyone denying its truth would deny that the sun was bright. The story of the debate at the banquet came to the President of the Magistrates and he congratulated the Father, as did others also, who had concluded that what they had formerly considered to be a barbarous law was not so barbarous as they had imagined. Father Ricci, himself, thanked God that the foundations of the Christian law were finally being laid in the kingdom of China.

Source: Gallagher, L. J. . Trans. (1953). *China in the sixteenth century: The journals of Matthew Ricci: 1583–1610* (pp. 337ff). New York: Random House.

orders and normally take vows of poverty, chastity, and obedience.

The "People of God" includes not only the clergy and the religious but the laity as well. Married or single, engaged in secular professions or occupations, lay persons are said to share in the mission of the Church. As lay

apostles, they assist bishops and priests in the conduct of church affairs, but they cannot act independently or in opposition to their religious superiors. Despite some softening by Vatican II (1962–1965) and more lay participation, the Church remains an authoritarian, hierarchical structure.

As defined by the Council of Trent (1545–1563), the vehicles of divine grace that enable a Catholic to attain salvation are the seven sacraments: baptism, penance, the Eucharist, confirmation, matrimony, Holy Orders, and Anointing of the Sick. Only those who have received Holy Orders are authorized to administer all seven sacraments. Other basic teachings of Roman Catholicism are the Trinity (the presence of three Persons in one God: the Father, the Son, and the Holy Spirit), the immortality of the soul, the resurrection of the dead, justification by faith and good works, an afterlife of reward or punishment, and special veneration of the Virgin Mary as the Mother of God. There is also veneration of the saints, but Catholics are directed not to pay an exaggerated attention to the saints.

The expression of Roman Catholicism takes the form of the liturgy, the rites and ceremonies of the Church. The most important act of worship is the Mass, which is composed of the Liturgy of the Word (readings from Scripture) and the Liturgy of the Eucharist (Holy Communion). Like other aspects of Roman Catholicism, the liturgy, especially the Mass, has been adapted to regional environments, and the uniqueness of each culture is respected. Since Vatican II the vernacular has been used extensively, and although Gregorian chant is considered proper to the Roman liturgy, other forms of music are permitted.

Major Historical Developments

The beginning of the Roman Catholic community, as of other Christian bodies, is dated from the appearance of Jesus Christ to the apostle Peter after his crucifixion, burial, and resurrection. The apostles, like Jesus, were Jewish, as were the first Christians. What distinguished these early Christians from other Jews was their conviction that Jesus was the Messiah, that he had been resurrected

"I have loved justice and hated iniquity: therefore I die in exile." • POPE GREGORY VII (c. 1020–1085)

from the dead. After the martyrdom of the Deacon Stephen, about 33 CE, these Christians, who had maintained close ties with the Temple, scattered and preached the Gospel wherever they settled. With Paul (died c. 67 CE), Christianity came out of its Jewish mold, and Paul's missionary labors in the Mediterranean world made it the religion of the Gentiles.

Christianity spread rapidly in the Roman Empire. Women, especially widows and unmarried women, were active in the evangelization of pagan areas. Whether as preachers, deaconesses disbursing charity, or leaders of groups studying devotional literature, these women made their mark on the early Church. Their influence, however, was short-lived; by the third century their activities had been curtailed, and they were gradually excluded from any clerical function. The patristic writings disparaged women. St. Augustine of Hippo considered women innately inferior to men and saw them as symbols of carnality and original sin.

Another important development of Christian antiquity was the emergence of the concept of the primacy of Rome. Although Jesus had conferred preeminence on Peter among the apostles, he did not directly establish a papacy in Rome. Peter was almost certainly martyred in Rome, and thus Rome became a sacred place, a new Jerusalem for early Christians. The prestige of the bishopric of Rome because of its association with Peter was enhanced by the fact that Rome was the political and cultural center of the vast Roman Empire. In an age of heresies such as Arianism, Montanism, and Pelagianism, the bishop of Rome was frequently called upon to condemn unorthodox teachings and mediate jurisdictional disputes.

The first Pope to claim primacy for Rome was Damascus (366–384 CE) at a council in 382 CE. Formulation of the doctrine was made by Leo I (440–461 CE), who stated that the Pope had the plenitude of power over the universal Church. Papal authority was subsequently augmented by papal missionaries who evangelized new kingdoms. It was also strengthened by the secession of Eastern Orthodoxy, first in the ninth century and then in 1054 in a final and permanent break.

To the concept of the primacy of Rome was added that

of the primacy of the Pope over secular rulers as well. Thus in the eleventh century Pope Gregory VII (1073–1085) and his successors ended the control of feudal lords and kings over the selection of bishops and abbots, but in the process, brought about major changes in Roman Catholicism. Secular and sacred domains were sharply delineated, and the role of the laity in the selection of bishops, which dated back to Christian antiquity, was completely eliminated. Absolute papal monarchy over the whole of Christendom reached its apogee under Innocent III (1198–1216) and Boniface VIII (1294–1303). In his quarrel with John of England, Innocent III claimed that temporal authority depended on spiritual authority. Boniface VIII went even further, maintaining in *Unam Sanctam* (1303) that every human being had to be subject to the Pope in order to be saved.

Despite the extravagance of papal statements, Roman Catholicism contributed much to the development and achievements of Western civilization. The concepts of popular sovereignty and limited government were part of Catholic political thinking, and canon law, which was applicable whenever a sacrament or a cleric was involved, was the most humane and equitable law of the times. In education, first the monastic schools and then the cathedral schools and the universities made formal schooling more accessible than ever before, though men, and especially those destined for a clerical life, were the principal beneficiaries. However, until the High Middle Ages, talented women in female monastic establishments received a high level of education and made contributions to theology, philosophy, and literature.

Gothic art and architecture, the magnificent works of Dante and Chaucer, and liturgical art, music, and drama all owed their inspiration to Roman Catholicism. In the universities the scholasticism of Thomas Aquinas (1225–1275) provided a systemization of Catholic theology and philosophy that was to last well into the twentieth century. Members of religious orders, such as the Benedictines, Franciscans, and Dominicans, provided social services and medical assistance.

Marring these achievements were coercion in religious matters through the Inquisition, established by Boniface

No one else holds or has held the place in the heart of the world which Jesus holds. Other gods have been as devoutly worshipped; no other man has been so devoutly loved. • JOHN KNOX (1514–1572)

VIII, and the persecution of Jews. The cruelty of the medieval Inquisition, which could employ torture to obtain confessions of guilt and could sentence those convicted of heresy to death by burning at the stake, varied considerably, depending on times and places. Wherever and whenever it existed it was a dreaded institution. As for anti-Semitism, ever since the beginning of the Christian era, Jews had encountered hostility when living among Christians, because they were considered guilty of deicide, of rejection of the Messiah.

As commerce and trade entered the medieval world, and as the proportion of Jews to Christians in these areas, especially money lending, increased, so did aggression against Jews. Jews were accused of avarice and economic exploitation, as well as of more serious charges, such as child murder and alliance with Satan. The worst of the persecutions took place during the Black Death of 1348/49, when Jews from Spain to Poland were accused of having deliberately caused the plague. In vain did the Avignon Pope, Clement VI (1342–1352), denounce this persecution, pointing out that the plague was striking Christian and Jewish communities indiscriminately and offering Jews a haven in Avignon.

The most traumatic event in the history of Roman Catholicism was the Protestant Reformation, which made the Roman Catholic Church a distinct and separate entity in the Christian world. By the beginning of modern times, the Renaissance, the scandal of the Great Western Schism ([1378–1417], when there were two or three who claimed to be Pope), the notorious immorality in the Church from top to bottom, and the prevalence of superstitious practices produced skepticism among intellectuals, anticlericalism among the common people, and fodder for nationalistic rulers. The indulgence controversy following Luther's posting of the Ninety-Five Theses united all who had reason to oppose the papacy, and by the end of the century Lutheranism, Anglicanism, and Calvinism had cost the Church the allegiance of half of Europe.

The Council of Trent (1545–1563) was convoked to deal with this crisis. Adopting a very rigid, defensive posi-

tion, the Council defined the sacraments, especially those that had been questioned by the Protestant reformers, and upheld traditional teachings regarding papal primacy, the hierarchical structure of the Church, justification, the nature of the Mass, clerical celibacy, and both tradition and Scripture as the deposit of faith. Latin was retained as the mandatory language of the Roman Church. The legacy of Trent was a very conservative Roman Catholicism.

During the scientific revolution of the seventeenth century, members of the curia opposed the heliocentric theory proposed by Galileo and brought about his condemnation (to be reversed by Pope John Paul II in the 1980s). In the Age of the Enlightenment, a climate of opinion that endorsed religious freedom, the power of reason, the possibility of a heavenly city on earth, and a natural religion ran counter to the tenets of Catholicism. The era of the French Revolution and Napoleon (1789–1815) inaugurated a period when secular nationalism became the new religion. Almost all modern trends and movements were declared anathema by Pope Pius IX (1846–1878) in the *Syllabus of Errors* (1864). This pontiff convened the First Vatican Council (1869–1870), which formally defined the doctrine of papal infallibility in matters of faith and morals, much to the consternation of many Catholic theologians, ecclesiastics, and lay persons of the period.

Early in the twentieth century, Pope Pius X (1903–1914) railed against “Modernism,” excommunicated “Modernists,” and suppressed liberal Catholic theologians and historians. His successor, Benedict XV (1914–1922), ended the hunt for “Modernists.” He also permitted Italian Catholics full participation in politics, something that had been forbidden by previous popes because Italy had been unified at the expense of the Papal States. During the Age of Totalitarianism, Roman Catholicism came under attack by Italian Fascism, Nazism, and Communism.

World War II broke out during the reign of Pope Pius XII (1939–1958), a controversial figure. As the war developed and Nazi atrocities, especially against Jews,

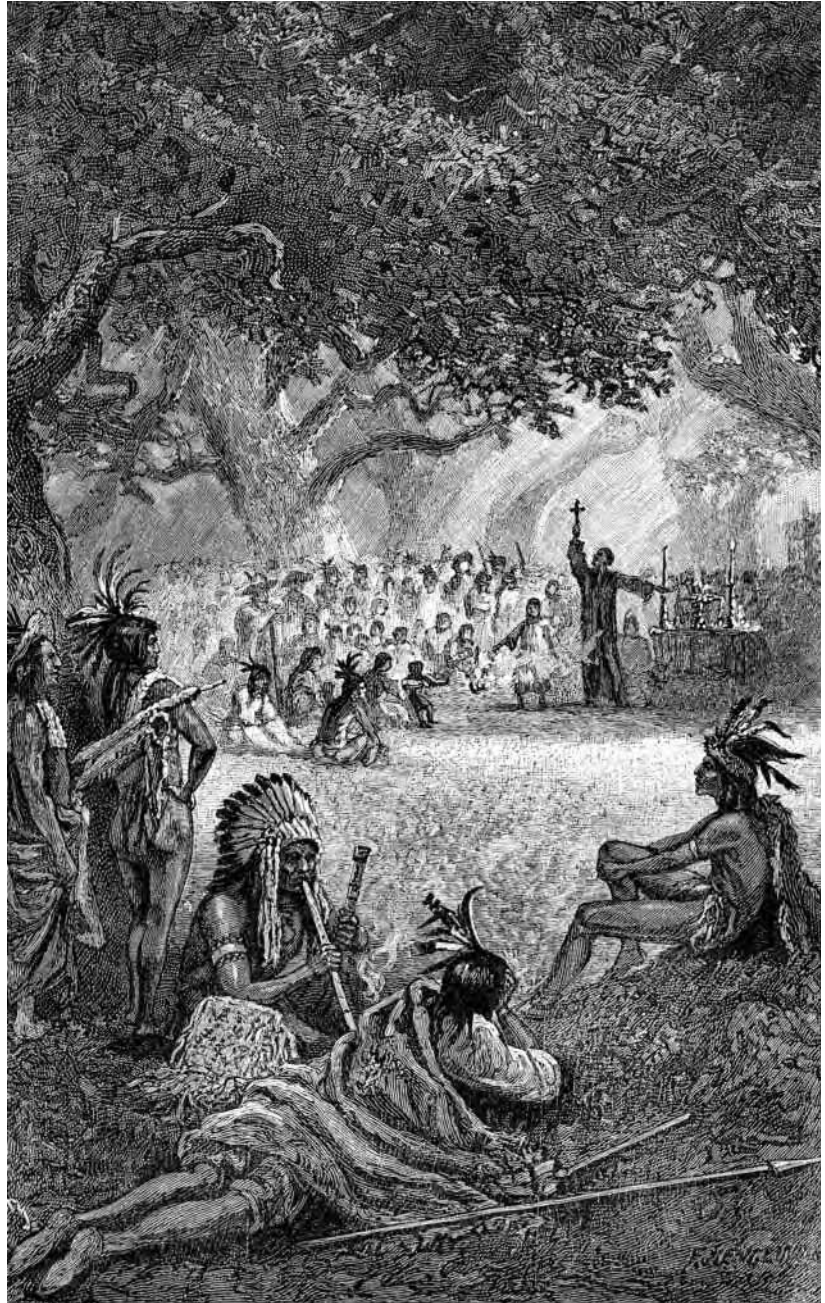
Missionaries associated with the Spanish Empire established a trail of missions in the American southwest and California. This drawing depicts a Jesuit missionary seeking converts among Native Americans in California. The costume of the Native Americans is actually that of Native Americans of the Plains, not California.

became known, he was expected to speak out on behalf of Jews. For reasons that became the subject of heated debate after the war in both Catholic and non-Catholic circles, he alluded to the genocide of Jews only in general, not specific, terms, even while providing Jews with money and refuge in the religious houses of Rome.

Contemporary Trends and Problems

With Pope John XXIII (1958–1963), Roman Catholicism embarked upon uncharted waters. A compassionate and approachable man, John XXIII's most momentous act was the convocation of a general council, known as Vatican II (1962–1965). In his inaugural address to the three thousand bishops and theologians drawn from all over the world, he declared that the "Church could and should adapt to the needs of the world." His message was one of *aggiornamento*. During the four sessions held between October 1962 and December 1965, every aspect of Roman Catholicism was explored, with a view to creating more openness and flexibility.

The Decree on the Church, instead of identifying the Roman Catholic Church with the Church of Christ, stated that the Church of Christ "subsisted" in the Roman Catholic Church. Papal infallibility was to some extent weakened by the introduction of the concept of collegiality—that is, the Pope and bishops shared respon-



sibility for the Church. Even more revolutionary were the decrees on religious freedom, Jews, and relations with the other Christian churches. The Decree on Religious Liberty stated that every person "has a right to religious liberty." The Decree on Other Religions asserted that Christ's Passion could not be "blamed on all Jews then living, without distinction, nor upon the Jews of today." It deplored "the hatred, persecutions, and displays of anti-Semitism directed against Jews at any time and from any

Tacitus on Nero's Persecution of the Christians

In his historical work Annals, Tacitus (c. 55–120 CE), a Roman public official and orator, covered the Roman empire from 14–68 CE. The extract below from Annals 15.44.2-8 is significant because it is an early mention of Christianity in a non-Christian source.

Yet no human effort, no princely largess nor offerings to the gods could make that infamous rumor disappear that Nero had somehow ordered the fire. Therefore, in order to abolish that rumor, Nero falsely accused and executed with the most exquisite punishments those people called Christians, who were infamous for their abominations. The originator of the name, Christ, was executed as a criminal by the procurator Pontius Pilate during the reign of Tiberius; and though repressed, this destructive superstition erupted again, not only through Judea, which was the origin of this evil, but also through the city of Rome, to which all that is horrible and shameful floods

together and is celebrated. Therefore, first those were seized who admitted their faith, and then, using the information they provided, a vast multitude were convicted, not so much for the crime of burning the city, but for hatred of the human race. And perishing they were additionally made into sports: they were killed by dogs by having the hides of beasts attached to them, or they were nailed to crosses or set aflame, and, when the daylight passed away, they were used as nighttime lamps. Nero gave his own gardens for this spectacle and performed a Circus game, in the habit of a charioteer mixing with the plebs or driving about the race-course. Even though they were clearly guilty and merited being made the most recent example of the consequences of crime, people began to pity these sufferers, because they were consumed not for the public good but on account of the fierceness of one man.

source.” The Decree on Ecumenism called for dialogue with the Protestant churches to achieve agreement on theological differences. In this decree, the focus is not on a “return” to the Catholic Church, but on the spirit of Christ at work in the churches and communities beyond the visible borders of the Roman Catholic Church.

The air of optimism that pervaded Vatican II soon dissipated in the post-Vatican years. The dialogue with Protestant churches made little progress with respect to such issues as papal primacy and infallibility, the nature of ordination, the relationship between Scripture and tradition, the nature of the Eucharist (a memorial service or transubstantiation) and the role of Mary in the Divine Plan. The “silence” of Pope Pius XII regarding the Holocaust was an irritant in many Jewish circles, despite the repeated apologies by Pope John Paul II (1978–) for the sins of the Church against Jews.

Within the Roman Catholic Church there was increasing polarization, some Catholics believing that Vatican II had gone too far and others countering that it had not gone far enough. The positions of Pope John Paul II were generally conservative. Traditional morality in such mat-

ters as divorce, premarital sex, contraception, abortion, homosexuality, euthanasia, and genetic engineering was affirmed. The role of women in the Church and clerical celibacy occasioned fierce controversy.

In the 1980s and 1990s, as traditional religious orders declined and the number of priests declined dramatically, women assumed liturgical and administrative positions in the Church, serving as chaplains, seminary professors, and spiritual directors. Inevitably the question of the ordination of women came up. In an effort to end the discussion, John Paul II in *Ordinatio Sacerdotatis* unequivocally stated that the Church did not have the authority to ordain women.

A revival of the issue of clerical celibacy was provoked by the priest sex scandal that rocked the Roman Catholic Church, especially its American branch. It became evident at the turn of the century that for decades bishops had moved priests who sexually abused children from one parish to another in an effort to avoid scandal. In 2002 the Vatican and the American hierarchy adopted stringent measures to purge the clerical ranks of offenders and to ensure the protection of children, but the extent of priest

I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forgo their use. • GALILEO GALILEI (1564–1642)

sexual abuse raised the question of clerical celibacy as the possible cause of such offenses. However, the Vatican denied a link between celibacy and pedophilia and/or homosexuality, and reaffirmed the validity of a ban on marriage for priests.

As the twenty-first century unfolded, discord and polarization seemed to foretell a new crisis for the Church, paralleling that of the Reformation era. Yet most Catholics refused to abandon the Church and sought instead a new identity, respectful of the past but adapted to the needs of society.

Roman Catholicism in the Non-European World

Until the sixteenth century Roman Catholicism was co-extensive only with western and central Europe. During the Age of Discovery, religious orders, always the Church's pioneers in evangelization, reached out to the far corners of the world. The first missionaries to the Americas, Africa, and Asia were the Franciscans and Jesuits, soon joined by Augustinians, Dominicans, Carmelites and others. As early as 1622 the papacy set up the Sacred Congregation for the Propagation of the Faith. In the nineteenth century the older orders were augmented with new ones, such as the Missionaries of Africa and the Missionaries of the Divine Word, orders formed specifically for work in the non-Western world. Consciously or unconsciously, these missionaries were conduits for the expansion of important elements of the Western world.

Catholicism achieved its greatest success in Latin America (Spanish and Portuguese America). From its earliest settlements in the Americas, the Spanish crown had a papal mandate to christianize the lands it colonized. Beginning in 1573 Spain established *la mision*, whereby the native Indians were placed under the direct care of missionaries, protected by Spanish troops. Most missions flourished, notably the Jesuit Reductions of Paraguay and the Franciscan missions of California and the U.S. Southwest. The native peoples adopted not only the religion of the Spanish but also their language, culture, and occu-

pations. As a result, native culture was all but obliterated, and inhumane treatment of the Indians occurred, despite government regulations to the contrary and the strong defense of the Indians vocalized by such missionaries as the Franciscan Junipero Serra and the Jesuit Pedro Claver.

Spanish rule ended early in the nineteenth century, but the Church and especially the hierarchy retained its dominant role in society. As the masses gradually became estranged from the Church because of its wealth, anti-clerical legislation was enacted in many of the Latin-American states. The church-state quarrels ended in separation of church and state, although restrictive legislation if not persecution persisted in many countries, notably Mexico.

Catholicism had to contend with internal dissension as well as external hostility. From the 1960s to the end of the century, liberation theology divided the Church. According to this theology the Church's primary obligation was to improve the socioeconomic status of the masses. Liberation theology encountered the opposition of both Latin American and Vatican prelates, who contended that it was too sympathetic to Marxist models and that its base communities ("the popular church") were anti-institutional.

The history of Catholicism in Brazil, originally a Portuguese possession, does not differ radically from that of Catholicism in Spanish America, although the Brazilian brand of Catholicism had a greater admixture of ancient heathen elements. From the first Portuguese settlements in the sixteenth century, Franciscans and Jesuits preached the Gospel, at the same time building churches and establishing schools and charitable institutions. Catholicism prospered especially between 1680 and 1750. Decline followed when the anticlerical ministry of the Marquis of Pombal expelled the religious orders. The missionaries were readmitted in the nineteenth century, but the emergence of an independent Brazil and the subsequent disestablishment of the Church under the Republican constitution of 1889 prevented attempts to recoup previous losses. In the twentieth century recurring economic crises and military governments further hampered

"If you want peace, you must work for justice." • POPE PAUL VI (1897–1978)

advances in the Catholic Church. Liberation theology was embraced by many churchmen as a way to end the socio-economic injustices that plagued Brazilian society, but, as elsewhere, this theology had to be jettisoned. In the early years of the twenty-first century, some 75 percent of Brazilians continued to call themselves Roman Catholics, giving Brazil the largest Catholic population in the world. Latin America as a whole had the largest block of Roman Catholics in the world: 473 million. The monopoly held by the Church in this part of the world, however, has been threatened by the inroads of Protestantism, especially evangelical Protestantism from the United States, as well as urbanization, consumerism, and globalization.

In North America, New France (Canada) became Catholic owing in large measure to the zeal of the Franciscans and Jesuits who accompanied the French colonizers and established a real bond with the natives. When France surrendered Canada to England in 1763, it was with the assurance that the rights of the Roman Catholics would be protected. The Church continued to flourish; by 2000, about 45 percent of the population was Roman Catholic.

In the United States Roman Catholicism was first introduced by the Spanish missionaries in the areas controlled by Spain, such as California in the West and Florida in the East. In English colonial America Catholicism grew from a small group of English Catholics who settled in Maryland in 1634. The American Catholic Church was strongly committed to separation of Church and State. Annual episcopal conferences dealt with problems peculiar to the American environment, such as the assimilation of immigrants, trusteeism, and the threat presented by nativism. Lay Catholic generosity and the labors of religious orders, especially female orders, contributed to the success of the Church. By 2000 it was the largest religious body in the United States.

Roman Catholicism can be said to have achieved only moderate success in Africa. North Africa was solidly Muslim when the Europeans first sought settlements in Africa. Missionary activity in central and southern Africa was initiated by the Portuguese in the sixteenth century. The advent of the slave trade and intertribal warfare were serious obstacles to the evangelization of the Portuguese

outposts. By the mid-nineteenth century, as European imperialistic rivalry heated up, most of the natives who had been converted had reverted to paganism. Another wave of evangelization began with the White Fathers in the last quarter of the nineteenth century. Large areas of the Congos (French and Belgian) were converted, as well as Uganda. Military coups, tribal warfare, in which Catholics of one tribe slaughtered Catholics of another tribe, and Cold War politics all had devastating results for Catholic churches. Vatican II was a mixed blessing for the African churches. On the one hand it led to a hierarchy that was almost entirely African and it also provided Mass in the vernacular, with the addition of traditional singing and dancing. On the other, the prelates who replaced the Europeans tended to be more conservative, and the downplaying of sacramentals, such as medals and holy water, eliminated a previous point of contact with traditional religions. By the beginning of the twenty-first century, Catholics comprised about 16 percent of the total African population. These Catholics were to be found mostly in Angola, the Democratic Republic of the Congo (former Belgian Congo), the Republic of the Congo (former French Congo) and Uganda. Noteworthy in the history of African Catholicism is the general lack of acculturation as well as deviation from Roman Catholic norms in various areas, such as priestly celibacy, monogamy, and mixed marriages.

In Asia the greatest success of Roman Catholicism was achieved in the Philippines, where Catholicism was introduced by Governor Miguel de Legazpi and the Augustinians in 1565. Through the friars (Augustinians, Franciscans, and Dominicans) and the Jesuits, Spanish culture was easily transplanted to the Philippines, encountering resistance only in the southern islands, where Islam had been established since the fourteenth century. The Spanish missionaries taught the natives better agricultural and horticultural techniques, introduced arts and crafts, and strongly influence architecture. Respectful of Philippine traditions, they produced some excellent studies of Philippine history and culture. No attempt was made to suppress Tagalog, one of the major languages of the islands. Despite difficult times brought on by decades



of foreign occupation (American and Japanese), dire poverty, and terrorist organizations, Catholicism was the religion of 83 percent of the population as of 2003.

Little headway was made by Roman Catholicism in the rest of Asia: Roman Catholics numbered less than 3 percent of the total Asian population as the twenty-first century opened. The main reason for the failure of Roman Catholicism to make inroads in countries such as China, Japan, and India was that missionaries encountered ancient and proud civilizations that made the missionaries seem culturally inferior as well as possible political threats. A contributory factor was the failure of papal authorities to allow the missionaries sufficient flexibility in dealing with Asian religions until it was too late.

A survey of Roman Catholicism in the non-European worlds indicates that it was very successful in Latin America, moderately successful in Africa, and except in the Philippines, a failure in Asia. The degree of implantation of Western culture varies with time and place.

Elisa A. Carrillo

See also Missionaries; Pilgrimage; Ricci, Mateo; Urban II

Further Reading

- Abbott, W. (1966). *Documents of Vatican II*. New York: America Press.
- Ben-Sasson, H. H. (1976). *A history of the Jewish people*. Cambridge, MA: Harvard University Press.
- Bokenkotter, T. (2004). *A concise history of the Catholic church*. New York: Doubleday.
- Brown, R. (1994). *Introduction to New Testament Christology*. New York: Paulist Press.
- Catholic University of America (Eds.). (2003). *New Catholic encyclopedia*. Farmington Hills, MI: Gale Press.
- Duffy, E. (1997). *Saints and sinners, a history of the popes*. New Haven: Yale University Press.
- Dulles, A. (1988). *The reshaping of Catholicism*. New York: Harper and Row.
- Encyclopedia Britannica Almanac*. (2004). Chicago: Encyclopedia Britannica Press.
- Himes, M. (2004). *The Catholic church in the 21st century*. Liguori, MO: Liguori Press.
- History of Roman Catholicism. In *Encyclopedia Britannica* (2004). Encyclopedia Premium Service. Retrieved from www.britannica.com/eb/article?Eu=117865.
- McNamara, J. (1996). *Sisters in arms*. Cambridge, MA: Harvard University Press.
- Reuther, R. (1974). *Religion and sexism*. New York: Simon and Schuster.

Celts

The designation “Celts” has traditionally referred to the groups of indigenous European peoples who first inhabited the southernmost reaches of contemporary Austria, Switzerland, and Germany in antiquity. From the ninth century BCE onward, these groups began to disperse widely throughout continental Europe and eventually reached Ireland, England, and Scotland. Although a strong claim cannot be made for the absolute uniformity of social customs among these groups, societal and linguistic affinities among them are sufficient to support the conclusion that they were part of a single cultural continuum. An identifiable Celtic ethos (the distinguishing character, sentiment, or guiding beliefs) appears to have emerged in Europe about 800 BCE north of the Alps mountain range. Many of its distinguishing practices were inherited from the earlier Urnfield culture (named for its practice of burying cremated remains of the deceased in urns), which flourished from about 1300 BCE to about 800 BCE. These practices included agriculture, metallurgy (particularly in bronze), carpentry, and the manufacture of textiles, weapons (swords, shields, and armor), utilitarian goods (e.g., wheels), household utensils (metal cooking ware), and items for personal adornment (e.g., metal bracelets and brooches). Early Celts continued many of these practices. Through time they became known for their proficiency in the mining of ore, their mastery of iron technology, the richness of their folkloric and expressive traditions, their egalitarian view of the relationship between men and women, and their ingenuity.

Providing a precise terminus for the historical span of Celtic culture is a difficult task, in part because many of the culture’s features gradually became part of the national consciousness of those people now living in the United Kingdom and Europe. According to at least one estimate, by the seventh century CE the impact of Roman culture that spread under imperial protection as well as the mixture of ideas and value systems generated by migration and social contact resulted in the loss of a distinctively Celtic ethos in most of Europe. This loss did not occur in

Brittany (a region in France), Wales, Scotland, and Ireland. In the United Kingdom, for example, Christianity provided one important institutional matrix within which Celtic traditions were both preserved and transformed from at least the second century CE onward. Nonetheless, some scholars contend that the number of identifiable cultural survivals is sufficient to make the claim that a Celtic core exists for most countries that are part of the European Union. As a result, in recent years many people have reclaimed parts of this heterogeneous tradition both in fashioning pan-European identities and in creating new religious practices that selectively appropriate older Celtic antecedents. Those areas in which the living stream of Celtic folkways and mores has continued to flow—and where vestiges of more archaic customs have been retained with less modern adaptation than elsewhere in Europe—are confined to Wales, Scotland, Ireland, and parts of western France.

Beginnings

Early Greek sources, beginning during the sixth century BCE, first mention the Keltoi people, *Keltoi* being the word from which the English word *Celt* is ultimately derived. Latin sources from the first century BCE onward refer to these people as either *Galli* (from which the Roman word for present-day France—*Gaul*—comes) or *Celtae*. Recent scholarship has noted that Greco-Roman attitudes about the Celts were not monolithic and actually changed through time. During the sixth and fifth centuries BCE the Celts were seen as one of many known indigenous groups. Later, from the fourth to the second century BCE, they were seen as an immediate military threat and classified in pejorative terms. During the second and first centuries BCE they were seen simply as an anthropological curiosity.

Early Celtic culture reached its apex between the fifth and third centuries BCE, a period roughly corresponding with the emergence of the La Tène style of art. The style



A fifth century Celtic Cross in Ireland.

is named for the archaeological site near Lake Neuchâtel in Switzerland at which artifacts representing it were discovered. La Tène's highly evocative and abstract canons have exercised a profound influence on subsequent Celtic artistic conventions and practices. Highly imaginative representations of the human form (e.g., both the head and the full body) as well as flora, fauna, and creative designs are found on weapons, household utensils, and items used for personal adornment.

Common Traits

Although daily life among the disparate Celtic groups would have been partially shaped by the environmental requirements of their various locales, on the whole the groups appear to have held certain traits in common. Personal hygiene was crucial, and the Celts are credited with the invention of soap. Archaeologists have also discovered items such as mirrors, razors, and combs, indicating a concern for hair care and personal appearance. Both sexes preferred long hair, which women wore in braided pigtailed. Men apparently shaved all facial hair, preserving only mustaches. Hunting (with the assistance of trained dogs), participating in competitive games, and feasting were also valued. Celts seem to have paid great attention to the preparation of food. They either boiled or roasted over charcoal meats such as pork and beef. They ate fish, bread, and dairy products. They collected honey, produced mead and beer, and imported wine. They used salt (which was mined in places such as Hallstatt, Austria) for seasoning and as a food preservative. The Celts must have encouraged moderation in consumption, particularly for men, who were expected to maintain optimal physical conditioning. Men and women wore the Celtic equivalent of pants, called *bracae*. Over these *bracae* women wore skirts. Other attire for both men and women included tunics, belts, cloaks, ornamental brooches (to fasten cloaks), and either leather shoes or sandals. Their personal dwellings were made of wood or

stone, and a Celtic city would often be fortified. Such cities, or *oppidas*, could be quite enormous, comprising 300 or more hectares. Married women maintained independence in several areas of life, one of which was the ownership of goods and the other of which was participation in civic life. Women controlled their own property when married, could be designated as tribal leaders, and were allowed to participate fully in military activities. The Celts were known for their military prowess. Warriors were fond of one-to-one engagement on the battlefield, and standard equipment typically consisted of long sword, spear, lance, javelin, sling, bow, and shield. Celts also used horse-drawn chariots and musical instruments (i.e., the trumpet) in military operations. Heroism and other virtues associated with the conduct of war were cherished parts of the Celtic worldview. Scholars have suggested that such virtues would later become the backbone of European chivalric ideals. Celtic burial practices, which included interring the deceased with items used in daily life, indicate a belief in the continuation of life beyond the grave. Religious life was regulated by a special class of practitioners known as “druids” and seems to have centered on observance of festivals tied closely to the cycle of agricultural activities, and the Celtic pantheon contained numerous deities, many of which were female. Stewardship of Celtic folklore fell within the purview of bards, who served as entertainers, social commentators, and guardians of historical and mythic traditions.

Given its richness, Celtic culture is likely to engage both popular imagination and scholarly imagination for some time to come.

Hugh R. Page Jr.

Further Reading

- Cunliffe, B. (2003). *The Celts: A very short introduction*. Oxford, UK: Oxford University Press.
- Duffy, K. (1999). *Who were the Celts?: Everything you ever wanted to know about the Celts 1000 B.C. to the present*. New York: Barnes and Noble.
- Hubert, H. (2002). *The rise of the Celts*. Mineola, NY: Dover Publications.
- Moscati, S., Frey, O., Raftery, B., Szabo, M., & Kruta, V. (Eds.). (1999). *The Celts*. New York: Rizzoli International Publications.

Cereals

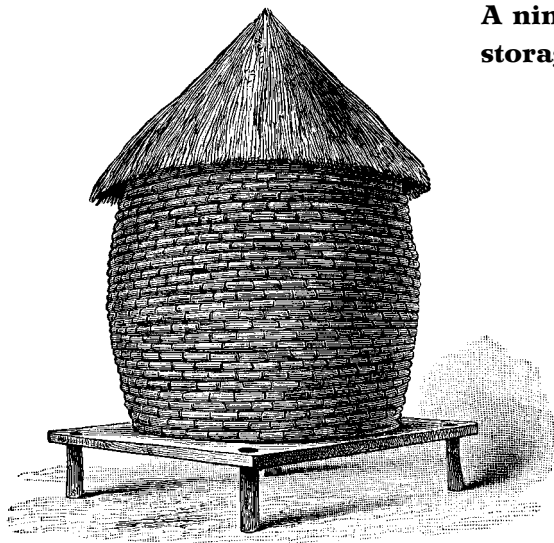
The word *cereal*, derived from the Latin word *Ceres* (the Roman goddess of agriculture), refers to all those herbaceous plants that yield fruits fit to produce flour for bread making. The most important cereals in the world are wheat, barley, oats, rye, maize (corn), rice, and broomcorn. Their cultivation has prehistoric origins and plays a major role in the world’s food system because of their nutritive value. In several countries, at least until the agricultural revolution of the eighteenth century and the introduction of chemical fertilizers, cereal monoculture (cultivation of a single crop) caused a limited development, too bound to the unsteady yield of only one type of farming. This limited development creates yields that are too scanty, yields that depend too much on climatic conditions, as in India, and a disproportion between cultivated surface and grazing land for livestock.

The world center for the production of oats, rye, barley, and corn is Europe; North America excels in growing maize; eastern Asia mainly grows rice, especially in China, India, and Japan, where in the past rice constituted two-thirds of the whole agricultural production.

In ancient Greece cereal production was diffused but nevertheless was not sufficient for the needs of the country; therefore, Greece had to stock up on cereal from

Cereals: Where They Originated

TYPE	LOCATION
Barley	Asia
Buckwheat	China
Corn (Maize)	Mesoamerica
Millet	South Asia
Oats	Central Europe
Rice	Asia
Rye	Central Asia



A nineteenth-century African storage bin for cereals.

Crimes and Pontus, then, during the Hellenistic period, from Egypt, which under the Ptolemy kings acquired a leading role in wheat export to Greece and Italy. The Romans included corn and barley in their diet after the conquest of Etruria and Campania and, later, of Sicily, which, with Sardinia, began to take the lead during the second and third centuries BCE and, after a period of decline, during the sixteenth and seventeenth centuries.

After the division of the Roman empire, cereal trade lost much of its importance in the western empire, where agricultural production was produced and consumed locally; on the contrary, cereal trade continued in the eastern empire (Byzantium), where the emperors distributed cereals free to the urban population. Thus, Constantinople (modern Istanbul in Turkey) became a main center for wheat import from Egypt. Around the ninth century rice, which had been cultivated exclusively in southeast Asia, began its diffusion in the Mediterranean Sea basin.

After 1000 CE in the West the corn trade recommenced but was limited to trade between the countryside and cities. At that time the countryside depended on the communes and could trade only with them. This dependence made supplies between the regions difficult, creating famines and a black market.

As a result food administration boards were created in many European cities to lower prices and, often with negative results, to assure supplies and prevent popular uprisings. Afterward, until the eighteenth century, many European countries used the same policies of a compulsory corn pool and state-controlled prices to avoid the free export and trade of cereals. A phenomenon that was

bound to cereal monoculture and the development of trade with the West, after the sixteenth century, was an increase in servile (serf) exploitation in eastern Europe, eastern Germany, Poland, and areas of the Danube, where it lasted until the middle of the nineteenth century.

In China people used cereals to pay taxes from the Tang dynasty (618–907 CE) until the late Middle Ages and the rise of commercial trades. During the Ming dynasty (1368–1644) irrigated rice cultivation became predominant in the plains and valleys, whereas in marginal lands the cultivation of other cereals—such as corn and barley—spread. Moreover, after the eighteenth century the cultivation of maize spread from the Philippines.

In countries such as India, China, and Japan irrigated rice cultivation, with large canalization works, always assured larger yields than did nonirrigated cultivation, allowing a large population increase. In Africa cereal distribution spread throughout Morocco (which was the supplier to Portugal during the Middle Ages), Egypt, and Sudan; the latter at the beginning of the sixteenth century had one of the most advanced agricultures in the continent, based on broomcorn and millet cultivation and—maybe independently—discovery of the plow.

In many regions of central and southern Africa a primitive cultivation of millet developed. Farmers first cleared small glades of vegetation with fire and then abandoned the glades after a few years of exploitation. In eastern Africa—from Ethiopia to Somalia to the Zambezi River—rice spread, after the Middle Ages, imported by Arabians and Indian merchants.

In North America cereals were not cultivated before European colonization. In Central and South America, the regions of the Aztecs, Mayas, and Incas—from Mexico to Peru—maize was cultivated in an advanced agriculture that used irrigation works widely but not the plow, which was still unknown in the region (seeds were placed in holes made in the ground with digging sticks).

The introduction of maize cultivation in Europe, which was contemporary with frequent agricultural crises at the beginning of the modern age, revolutionized the production system of cereal agriculture. Maize, needing less care and less particular climatic conditions than wheat,

had larger yields and thus, between the eighteenth and nineteenth centuries, began to be included in the diet of many rural populations, especially the poorest ones in the Mediterranean Sea basin, contributing to the decrease of famines.

Michele Simonetto

See also Agrarian Era; Agricultural Societies

Further Reading

- Heitland, W. E. (1921). *Agricola: A study of agriculture and rustic life in the Greco-Roman world*. Cambridge, UK: Cambridge University Press.
- Perkins, D. (1969). *Agricultural development in China, 1368–1968*. Edinburgh, UK: Edinburgh University Press.
- Rogers, J. E. T. (1902). *History of agriculture and prices*. Oxford, UK: Clarendon Press.
- Slicher van Bath, B. H. (1963). *The agrarian history of western Europe*. London: Edward Arnold.

Charlemagne

(742–814 CE)

KING OF THE FRANKS AND
EMPEROR IN WESTERN EUROPE

Charlemagne, whose name means Charles the Great, reshaped early medieval Europe by uniting most of Latin Christendom and contributing to the preservation of classical Latin learning, thereby laying the foundations for political and cultural developments in Europe for centuries to come. He ranks among the most important individuals—along with Heraclius of Byzantium, Muhammad, and Sui Wendi (founder of China’s Sui dynasty)—who contributed to shaping the post-Classical Eurasian world. The Latin form of his name, *Carolus*, gives us the adjective *Carolingian*, which describes his empire and the historical period

Charles was the elder son of Pepin the Short and the grandson of Charles Martel, both rulers of the Franks, a West Germanic people occupying Gaul and some other lands west of the Rhine River. After a brief succession struggle following his father’s death, Charles assumed

control of the Frankish realm in 771 CE. He then embarked on the career of conquest and consolidation that earned him the cognomen “the Great.” Nearly forty years of Charles’s campaigning brought large new areas under Frankish rule. Charlemagne’s efforts were crowned, literally, on Christmas Day of 800 CE, when Pope Leo III bestowed the title of “Emperor of the Romans” on him. Even the Byzantines, to whom that title had previously been reserved, had to acknowledge Charlemagne’s position as emperor in the West, for by this time he ruled virtually all of Western Europe except Iberia and the British Isles. He died in January 814 CE, leaving his empire to his only son, Louis.

Charlemagne came of age at a time when western Europe was only a shadow of what had been at the height of the Roman Empire: the economy was underdeveloped and currency was in short supply; communications were slow and difficult; literacy was at a low ebb; and political power had become both fragmented and privatized. Despite these unfavorable circumstances, Charlemagne’s dominating physical presence, tirelessness, personal and political persuasiveness, and his ability to improvise systems of administration from limited resources allowed him to create a large empire through the use of military force. But the edifice proved fragile. The empire began to suffer from Viking invasions even before the king died, and factionalism increased during his son Louis’s reign. When Louis died, in 840 CE, he divided the empire among his three sons, who fell to warring among themselves. The three kingdoms disintegrated rapidly thereafter, under combined internal and external stress.

Clearly, the fate of Charlemagne’s empire is further evidence of the central role the king’s person and personality had played in creating and maintaining it. Some of Charlemagne’s administrative techniques, especially the granting of land (“fiefs”) instead of a salary to his officials in return for their service and the use of itinerant royal inspectors to supervise those landed local officials, survived in fragmented form as building blocks for the rulers of later ages. Above all, the emotional legacy of a powerful, just ruler and a unified Christendom survived

To have another language is to possess a second soul. • CHARLEMAGNE (742–814)

as a political ideal for most of the Middle Ages in Europe. This emotional legacy was reinforced by Charlemagne's even more lasting achievements as a cultural leader.

Unlike the great majority of his contemporaries, Charlemagne believed he had a duty to rule for the benefit of his subjects, and he earnestly pursued the intellectual and spiritual improvement of his realm. He attracted scholars from across Europe to his court, the most prominent being his biographer Einhard and the British monk Alcuin; he promoted church reform and supported missionary activity in conquered lands; he instituted educational reforms, especially at the level of monastic schools, whose transcriptions were responsible for the preservation of many classical texts; and his court instituted an important reform in handwriting, as the script of the time was nearly illegible. The Carolingian miniscule script that resulted was such a model of clarity that it became, through its revival by Renaissance scholars, the basis for modern print typefaces.

Charlemagne's impact on cultural affairs was perhaps even more striking than his political and military achievements, because he was trained in the latter but not the former. He learned to read only as an adult, and he never learned to write; yet he took a keen interest in literature, learning, and even Church doctrine. In addition to his native Germanic tongue, he knew Latin and a bit of Greek. Through his personal example and by providing a hospitable environment for scholars, he fostered what historians have come to call the Carolingian Renaissance, a crucial stage in the formation of the Western European cultural identity. This achievement, made possible by the extent and influence of his empire, justifies Charlemagne's reputation as the "father of Europe."

Stephen Morillo

Further Reading

- Bullough, D. A. (1970). *Europae pater: Charlemagne and his achievement in the light of recent scholarship*. *English Historical Review*, 85, 58–105.
- Bullough, D. (1974). *The age of Charlemagne*. London: G. P. Putnam and Sons.
- Einhard & Notker the Stammerer. (1969). *Two lives of Charlemagne* (L. Thorpe, Trans.). Baltimore: Penguin Classics.

- King, P. D. (Trans.). (1987). *Charlemagne: Translated sources*. London: Kendal.
- Fichtenau, H. (1959). *The Carolingian empire* (P. Munz, Trans.). Oxford, UK: Oxford University Press.
- France, J. (2002). The composition and raising of the armies of Charlemagne. *The Journal of Medieval Military History*, 1, 61–82.
- McKitterick, R. (1983). *The Frankish kingdoms under the Carolingians 751–987*. London.
- McKitterick, R. (Ed.). (1995). *The new Cambridge medieval history, c. 700–c. 900* (Vol. 2). Cambridge, UK: Cambridge University Press.
- Nelson, J. L. (1988). Kingship and empire. In J. H. Burns (Ed.), *The Cambridge history of medieval political thought, c. 350–c. 1450* (pp. 211–251). Cambridge, UK: Cambridge University Press.
- Wallace-Hadrill, J. M. (1983). *The Frankish church*. Oxford, UK: Oxford University Press.

Charles V

(1500–1558)

HOLY ROMAN EMPEROR

Charles V (b. Ghent, Belgium, 24 February 1500; d. Yuste, Spain, 21 September 1558) ruled over about 28 million subjects in Europe, or some 40 percent of the continent's population, from the time of his election as Holy Roman emperor on 28 June 1519 until he gradually abdicated power in the fall and winter of 1555–1556. Moreover, during his reign, Hernán Cortés conquered Mexico (1519), and Francisco Pizarro subjugated Peru (1530–1532). These expeditions were carried out in Charles's name, as both King Charles I of Castile and Holy Roman emperor. They led to the creation of colonies in the New World, ruled directly from Spain in the interest of the Castilian crown.

A series of dynastic events made Charles the sole heir of an extraordinarily large number of countries. His father, Philip the Handsome, son of the Holy Roman emperor Maximilian I, of the house of Habsburg, ruled over the Low Countries and then in 1504 also became king of Castile, on behalf of his wife Joan; he died in 1506. At the death of Charles's maternal grandfather Ferdinand, in 1516, Charles was to inherit the crowns of Castile and Aragon from Ferdinand and Isabella (who died in 1504), thus uniting for the first time the two Spanish kingdoms under a single ruler. Moreover, the

*And in thy seed shall all the nations of the earth be blessed;
because thou hast obeyed my voice.* • GENESIS 22:18

Aragonese legacy also included the kingdoms of Sicily, Naples, and Sardinia, as well as the Balearic Islands. Control over all these territories implied hegemonic power over the western Mediterranean. In September 1517, Charles arrived in Spain to be inaugurated by the *cortes* (assemblies of estates) of his various kingdoms. Having been educated in French, and being surrounded by councillors from his northern territories, he experienced great difficulties in gaining control of his situation and having his authority accepted. As a reaction against decades of bad governance and the intrusion of foreign councillors, revolts broke out in various cities in 1520, lasting until 1522.

The death of Charles's paternal grandfather, Holy Roman emperor Maximilian, raised a new challenge in 1519. Although other German princes, especially Elector Frederick the Wise of Saxony, might have been chosen to succeed him, the House of Habsburg strove to keep the title in the family. And although Ferdinand (the younger son of Philip the Handsome) might have been more available than his brother, the king of Spain, Sicily, Naples, and a variety of other lands, Charles nevertheless insisted on his primogeniture with the argument that the fearsome expansion of the Ottoman Turks required all Christendom to unite. Important political concessions were made to the electors and huge sums were spent to bribe them.

Charles managed with great difficulty to keep his empire together, even adding to it the duchy of Milan in 1535, and winning control over or alliances with the other powers in Italy, but he obviously was a victim of imperial overreaching. He tried to keep all decisions in his own hands, keeping in close contact by correspondence with members of his family and the high-ranking noblemen he had installed as regents, governors general, viceroys, and councillors in the territories where he was unable to reside in person. Further, he was convinced that he had to deal with the most urgent matters personally, which forced him to travel around Europe nearly constantly. Obviously, this created long delays in the decision-making processes in all other territories (in which he was not currently travelling).

The main challenge to his authority arose from his

ambition of keeping all his subjects loyal to the Catholic Church in a time when religious reformers were rapidly gaining followers, while the church hierarchy proved highly unwilling to understand the need to reform itself. Charles finally lost this battle, especially in the German empire, where several princes turned to the Reformation for reasons that had as much to do with faith as with their desire for autonomy. He was late to understand the gravity of the challenge Luther had launched against him personally at the Diet of Worms in 1521, and slow to react to it, mostly because of the multiplicity of his duties. He saw no other method of dealing with the Reformation movement than to postpone decisions, make provisional concessions, and try to convince the pope to convene a general council. When the Council of Trent finally opened in 1545, its first decisions were totally unacceptable for the Protestants, who had been strengthening their positions for nearly three decades. Charles was never able to accept the Religious Peace of Augsburg that his brother Roman King Ferdinand (since 1531) negotiated with the Diet in 1555, and he sent his letter of abdication to the Diet during its meeting in 1555. However, they did not choose his younger brother as his successor until 1558.

The second major challenge of Charles's reign was the external military threat from France and the Ottoman empire, sometimes even in conjunction with each other. His nearly continuous efforts to build fortresses and to mount campaigns with ever larger armies exhausted his subjects' resources, including those of his colonies, and finally left his successor Philip II—who succeeded him in his Spanish and Italian kingdoms and in the Low Countries—with a bankrupt state. Charles's reign showed the impossibility of keeping western Christendom united politically and ecclesiastically, and his failure to understand this caused his demise.

W. P. Blockmans

Further Reading

Blockmans, W. (2002). *Emperor Charles V, 1500–1558*. London: Arnold.
Carande, R. (2000). *Carlos V y sus banqueros* [Charles V and his bankers].
Barcelona, Spain: Critica.

If you want anything said, ask a man. If you want something done, ask a woman. • MARGARET THATCHER (B. 1925)

- Fernandez Alvarez, M. (1999). *Carlos V. El César y el hombre* [Charles V. The Caesar and the man]. Madrid, Spain: Espasa Calpe.
- Fuentes, C. (1992). *The buried mirror: Reflections on Spain and the new world*. Boston: Houghton Mifflin.
- Kohler, A. (1999). *Karl V. 1500–1558. Eine Biographie* [Charles V. 1500–1558. A biography]. Munich: C. H. Beck.
- Rodriguez Salgado, M. J. (1988). *The changing face of empire: Charles V, Philip II, and Habsburg Authority, 1551–1559*. Cambridge, UK: Cambridge University Press.
- Soly, H. (Ed.). (1999). *Charles V, 1500–1558 and his time*. Antwerp, Belgium: Mercatorfonds.
- Tracy, J. D. (2002). *Emperor Charles V, impresario of war*. Cambridge, UK: Cambridge University Press.

Child, Lydia

(1802–1880)

AMERICAN WRITER AND SOCIAL ACTIVIST

Lydia Maria [Francis] Child, political journalist, historical novelist, and cultural historian, was born in Medford, Massachusetts, on 11 February 1802, the youngest child of Susannah Rand and Convers Francis. She was educated at a local school in Medford, spending a single year in a “female academy” before her mother’s death in 1814, when she was sent to her sister Mary Francis Preston in Norridgewock, Maine. There Child was exposed to Native American culture, visiting the camps of the Abenaki and Penobscot families on the margins of the town. Her exposure to Native American culture, with its alternative narratives of conquest and settlement, allowed Child to develop the cross-cultural perspective that shaped her work as a reformer and historian.

Child was one of the most prolific writers of the nineteenth century, publishing over forty books and pamphlets as well as hundreds of short stories, letters, and poems. Her literary career began in 1821, when she left Maine to live with her brother Convers, a Unitarian minister, in Watertown, Massachusetts. A Harvard graduate, Convers shared the benefits of his education with his sister. However, Child’s awareness that her gender had been the cause of the disparity in their educations underpinned her social activism. Her first novel, *Hobomok*

(1824), was written in Convers’s study. A historical romance set in colonial America, *Hobomok* represented a revision of the masculinist history of Puritan settlement and the masculinist literary canon, bringing together themes that inflected Child’s work for the next half century. The novel rejected the prescribed “manifest destiny” of women and Indians, signaling also Child’s advocacy of interracial marriage as a means of achieving racial harmony. In this and later writings on Native Americans published in her influential children’s journal *Juvenile Miscellany*, Child explored the history of conquest from varying cultural perspectives. Founded in 1826, *Juvenile Miscellany* was radical in its sympathetic depiction of Native Americans and slaves. Although the journal was forced to close because of Child’s radical abolitionist views, it was later claimed that a generation grew up to share a passionate identification with slaves because of their exposure to these ideas in the *Miscellany*.

In 1825 Child published *The Rebels or Boston before the Revolution*, a political novel that won her the attention of David Lee Child, editor of the *Massachusetts Journal*. They married in 1828. Together they campaigned against the removal of the Cherokee people from their lands. Child anonymously published *The First Settlers of New England* (1829), decrying the dispossession of the Cherokee, a theme she revisited in her *Appeal for the Indians* in 1868. Meeting radical abolitionist David Lloyd Garrison in 1830, Child became fervently involved in his cause, publishing her radical *Appeal in Favour of That Class of Americans called Africans* in 1833. A comprehensive history of slavery, Child’s *Appeal* refuted racist myths through historical example, calling for emancipation and an end to miscegenation laws.

As part of a five-volume history project for the Ladies’ Family Library, Child produced a broad historical survey entitled the *History of the Condition of Women, in Various Ages and Nations* in 1835. As with many other nineteenth-century world histories, the structure of *Condition* is Eurocentric, as Child describes women’s condition in Europe in terms of progress towards modernity, while describing the condition of non-European women in relation to

timeless customary activities. For Child the ideal condition of womanhood was that of chaste union thus she deemed polygamy and other marital forms primitive. As distinct from many of her contemporaries, though, Child arranged her writing spatially rather than chronologically. Underpinning Child's analysis was her interest in abolition, and her discussion of polygamy echoes her attack on the sexual economy of slavery. Her depiction of African women demonstrates a sympathetic and detailed understanding of their cultural milieu; however she describes certain groups of women, from Australia and Papua New Guinea, as "frightfully ugly" (Child 1835, 1:228) and fails to critique colonialism except where slavery was adopted, indicating the limitations of her radical theories of race.

Child separated from her husband in 1841, taking up the editorship of the *National Anti-Slavery Standard* in New York. The popularity of her "Letters from New York" in the *Standard* revitalized Child's literary career. An emotional crisis in 1847 launched Child on a religious quest culminating in her *Progress of Religious Ideas* (1855). Prompted by a desire to ameliorate the "baptized hatreds of the human race," Child's three-volume text analyzed various world religions on equal footing with Christianity, reading sacred texts from the cultural perspective in which they were produced and showing that all such texts contained sublime truths. While the text historically decentered the Judeo-Christian tradition, it undercut this by claiming that Christianity contains "the vital element of progress" (Child 1855, 3:433).

Her religious crisis also caused Child to reconcile with her husband, and she returned to Massachusetts. Before the outbreak of the Civil War she wrote children's stories, antislavery tales, and influential antislavery tracts such as the *Correspondence between Lydia Maria Child and Governor Wise and Mrs. Mason of Virginia* (1860). She also edited Harriet Jacobs's *Incidents in the Life of a Slave Girl* (1861). The war brought agony to Child, who sought the emancipation of the slaves but was also a committed pacifist. In 1865 she compiled *The Freedman's Book*, a school reader for ex-slaves, and in 1867 she published her last novel, *A Romance of the Republic*, which held up

racial intermarriage as America's destiny. In old age she campaigned for black suffrage and against removal of Native Americans from their lands.

Mary Spongberg

See also Human Rights; Slave Trades; Women's Emancipation Movements

Further Reading

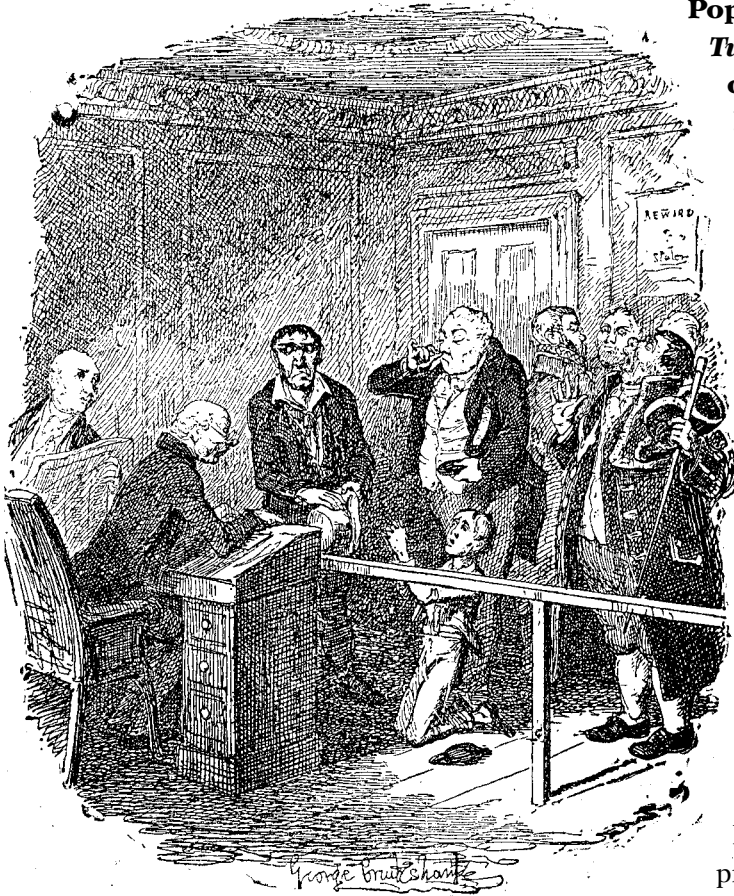
- Baym, N. (1995). *American women writers and the work of history 1790–1860*. New Brunswick, NJ: Rutgers University Press.
- Karcher, C. L. (1994). *The first woman of the republic: A cultural biography of Lydia Maria Child*. Durham, NC: Duke University Press.

Childhood

All societies focus heavily on children and childhood. Considering childhood on a global scale and in a global history context offers opportunities to distinguish between inherent, or natural, features of childhood and those imposed by particular economic, political, and cultural structures. It also challenges historians to think about the relationship between global forces and the phase of life in which individual personhood is determined.

At the same time, however, there are important limitations. The history of childhood is difficult to study because of the nature of sources. Adults speak about children far more than children speak for themselves, which distorts our view of childhood in the past. It is far easier, furthermore, to deal with childhood for elites than for ordinary people historically, for relevant sources are far more abundant. Nevertheless, some important ventures have already been made into the history of childhood, and there is growing interest in the topic among current historical researchers.

More is available, however, on childhood in Western history than on childhood in most other societies, which at least for the moment affects opportunities for study, including comparative opportunities. Childhood is also



Popular books like Charles Dickens' *Oliver Twist* called attention to the difficult lives of poor children in industrialized Europe. In this drawing, young Oliver is pleading for mercy before a magistrate.

that few would now defend). Other historians have claimed to find relatively little grief evinced when children died in the premodern West, partly because high birth rates cushioned any individual loss. From the eighteenth century onward, according to this classical school, childhood began to be more sharply differentiated as a separate stage of life, and bathed in greater sentimentality.

In contrast to this approach, a revisionist group, comprising mainly medievalists and early modernists, points to a clear recognition of childhood in earlier centuries, including distinct categories of legal treatment, along with high emotional investment by parents in individual children. It is clear, for example, that most families did grieve when children died, often viewing these events as decisive in family history—though this does not mean that the grieving process was the same as the modern emotional reaction. Debate continues, with some middle ground between the position that there has been no essential change in the conception of childhood and the position that there are massive modern-premodern contrasts; the more moderate position is probably the most accurate. Similar debates may apply to differences among societies, to the question of how many aspects of childhood are natural, and so uniform across the major societies in world history, and how many significant variations must be identified and explained.

closely shaped by local and regional factors—particular religions, laws, and so on. It has not been easy to see more global forces shaping childhood, at least before the nineteenth and twentieth centuries. There are few comments on the history of childhood in the pages of world history texts, a situation that may well change as further research occurs, opening new possibilities for a world history perspective on a vital topic.

Recognizing Childhood

Within Western history, fierce debates have raged over how much conceptions of childhood have changed over time, particularly in terms of children's position within the family. A classic work by Philippe Ariès, which really launched the study of the history of childhood, argued that premodern Western society had relatively little concept of childhood, viewing children as small adults and, as a result, often treating them harshly. Lloyd de Mause, a psychohistorian, picked up this claim when he argued that only in the twentieth century did children begin to be treated properly (a sweeping condemnation of the past

Children in Agricultural Societies

Much of world history is taken up with the development of agricultural societies and civilizations. We know several things about children in agricultural societies, and about comparative issues, even when further specific analyses remain desirable. First, most children in agricultural societies were put to work at a young age, and indeed the economic utility of children was vital to family calculations in any agricultural society. This remains true in agricultural societies today. One of the reasons birthrates rose when agriculture replaced hunting and gathering was because

of a need for labor. This does not mean that children were worked excessively hard, but that they were expected to help, and job training constituted a major part of the socialization of both boys and girls. Only an upper-class segment, as well as a few children identified as particularly talented from the lower orders, might be spared from work in order to spend significant time in school.

Second, because families in agricultural societies were fairly large, with an average birthrate of five to seven children per family, children had considerable interaction with siblings, and older siblings, particularly girls, were expected to help care for their younger brothers and sisters. As death rates between infancy and two years of age ranged from 30 to 50 percent of the total in agricultural societies, children in those societies also had extensive, intimate experiences of death.

There were also, however, a number of differences among various agricultural societies. Schooling is one; differences in schooling depended both on the dominant culture and on available resources. Islam encouraged efforts to provide some religious education, particularly in the cities, especially to boys but sometimes to girls. Hinduism, by contrast, fiercely limited access—at least to religious literacy—to the top three castes. Chinese Confucianism encouraged lots of education for a minority, but showed little concern for a broader base. But Confucianism as adopted in Japan under the Tokugawa shogunate (1600/1603–1868) produced widespread schooling, reaching up to 25 to 30 percent of all boys. Within Christianity, Protestantism encouraged efforts to promote literacy, whereas Catholicism, more reliant on the intermediary of priests, was traditionally less active.

Approaches to discipline also varied. American Indians were appalled at the amount of physical punishment dished out by Protestant immigrants. Denominations of Christianity that emphasized Original Sin, which no child could escape, tended to be strict. Hinduism, by contrast, encouraged a greater delight in children and their promise. Family structures also varied in ways that could affect childhood. The European-style family, introduced from the later Middle Ages (fourteenth–fifteenth century), emphasized relatively late marriage and nuclear, rather

From Independence to Cooperation

Anthropological research in the twentieth century showed that foraging peoples typically raised their children to be self-reliant and independent, while agricultural peoples stressed more compliance and cooperation in their children. If we can extrapolate from the present to the past, then it is quite possible that for much of human existence, children were raised to be independent, with cooperation becoming more important only about 10,000 years ago. The following account describes the pattern observed in the 1920s among the Ona (also known as the Selk'nam) foragers of Tierra del Fuego in southern South America.

If one observes the Feuerland/Fuegian/baby for a long time, one becomes aware of how much it is left alone to amuse or entertain itself. Already at the very beginning of existence one sees the foundation laid for the independence of the person and the solitude of the way of life that are peculiar to our Selk'nam. The parents would probably have time enough to devote themselves to their youngest or to offer him toys and songs; instead of this, they passively observe his harmless, awkward activity. It is noteworthy that the child does not feel lonely when it knows it is alone any more than it shows fear of dogs or strange adults. Such an attitude arises from a fearless self-assertion.

Source: Gusinde, M. (1931). *The Fireland Indians: Vol. 1. The Selk'nam, on the life and thought of a hunting people of the Great Island of Tierra del Fuego*. Wien, Austria: Verlag.

than extended, families; children had a closer, possibly tenser relationship with individual parents than was true in the extended families that were characteristic of eastern Europe and most of Asia. Because there were few adults around, Europeans often hung young infants on hooks in the house, so that they would not get into trouble while their mothers worked. In contrast Chinese and African mothers typically took their children with them to work in the fields, wrapping them on their backs and maintaining close physical contact.



In between commonalities and contrasts, agricultural societies varied (though more modestly) when it came to issues of gender in childhood. All the societies were patriarchal, emphasizing boys, particularly older boys, over girls. But some societies stressed the importance of boys more than others, to the point that in some female infanticide was used to get rid of unwanted girls and limit the total burden of children on individual families. This was true for long periods of Chinese history and also in classical Greece. Islam, however, worked hard against the older Arab practice of female infanticide, on grounds that both boys and girls had souls. Chinese Confucianism stressed more systematic inculcation of girls' inferiority than did Indian culture; one manual (written by a woman) urged that girl babies be placed at the feet of beds, to emphasize their lower position, while boys be allowed to sleep at the side of parents. There was also some variation in arrangements for marriage of older children. All agricultural societies stressed the importance of property transmission and adult supervision in marriage. In India, China, and some parts of Africa, marriages were arranged while girls were very young, whereas in regions where Christianity and Islam dominated, mate selection for children usually took place at a somewhat later age.

Childhood in Industrializing Societies

The world history of childhood shifts gears considerably as agricultural civilizations begin to be challenged by a more commercial world economy. Comparison remains important, but some wider generalizations are also possible. Western Europe and the new United States pioneered some of the crucial departures from the norms of premodern childhood, and while other parts of the world did not follow slavishly, there were some general patterns emerging by the later nineteenth century.

A gradual redefinition of the purposes of childhood, away from work and toward schooling, was a key change. The greater emphasis on education emerged in Europe and the United States as a result of Enlightenment beliefs in the educability and progressive possibilities of children. This view dovetailed with the long-term results of indus-

trialization which, after producing some initial factory exploitation of children, reduced the number of jobs children could do while increasing the need for literacy and numeracy in the labor force. From the 1830s onward, labor laws explicitly limited children's work. Other societies jumped on the educational bandwagon with varying degrees of speed. Japan, where schooling was already well developed, pushed for universal education from 1872 onward. Eastern Europe moved in the same direction, and in the post-World War II years under Communism, which disputed other aspects of the Western model, mass education became a major goal. Everywhere the numbers of children in school and the length of time devoted to education increased. Intriguingly, while girls lagged behind boys in educational access in some places, most mass education movements included girls, if only because of the need to improve the education of mothers as part of the wider association of childhood and schooling.

In the West, this fundamental redefinition of childhood was accompanied by heightened attention, at least in principle, to the innocence of children and to their lovable qualities. Birth rates began to drop, which expanded the emotional as well as financial investment in individual children. With the decline of infant mortality, particularly dramatic between 1880 and 1920, there were growing efforts to shield children from death and new movements for the legal protection of children. The concept of adolescence expanded the reach of childhood and resulted in the minimum legal age for marriage going up, as well as in growing attempts to regulate adolescent sexuality. By no means did all of this export to other parts of the world, but in most cases industrialization resulted in lower birth rates, which had a similar impact in increasing the attention lavished on individual children; this was true in Japan, for example, and, by the later twentieth century, in China as well.

By the twentieth century, and particularly after World War II, several global currents added to these patterns of change, though great diversity remained. Children's work received international attention. From the 1920s onward international organizations, such as the International Labor Office, formulated standards that would limit the

A common sight in Chinese malls: the mini-beauty pageant. These can advertise anything from shampoo to wedding services.

burden of work, particularly on young children. But the pressures of the global economy, which led manufacturers to seek ever cheaper labor, actually expanded the incentive for the use of child workers in some regions. By the later twentieth century half of all child laborers were employed in South and Southeast Asia. Economic pressures also

accounted for a growing sexual exploitation of older children with parents sometimes selling daughters to aid the family economy in societies such as Thailand or parts of Eastern Europe, where the sex trade has grown; some global tourism focused explicitly on sexual activities, and girls, rather than adult women, were sought because it was believed that they would be less likely to be infected with HIV. Some desperately poor families also exploited children for exportable body organs, while in Africa the growing phenomenon of child soldiers pointed to another disruptive pattern.

Against these trends, a global human rights movement with a focus on children gained increasing momentum. The Save the Children organization, which emerged in 1919 after World War I and the Russian Revolution, sought to help displaced children across Europe. Its mission evolved after World War II to a more general campaign to assist children materially and psychologically affected by war—leading, for example, to the 1996 United Nations Study of the Impact of Armed Conflict on Children. More general attempts to define children's rights internationally led to the 1989 United Nations Convention on the Rights of the Child, ratified within a decade by all but two countries, Somalia and the United States. The Convention enunciated rights in law and in educational access. In 1999 the International Labor Organization followed with Convention 182 against the most exploitative child labor, including sexual exploitation. These initiatives sometimes won superficial com-



mitments that led to little change, but some imaginative implementations have also ensued, such as a 1996 “foul ball” campaign that forced the Federation of International Football Associations to refuse to endorse soccer balls sewn by children, or a 2003 decision to stop the use of child riders in camel races in parts of Arabia.

Another global phenomenon affecting children involves new patterns of migration, emerging from the late nineteenth century onward and involving long-distance movement into societies with radically different cultures—for example, Asian migrations to the West, Caribbean migrations to the United States and Western Europe, or African and Middle Eastern migrations to Western Europe. Generational tensions and identity issues, part of any migration process, have been exacerbated.

Finally, the spread of global consumerism has obvious implications for children and childhood. Children often lead in picking up consumerist cues, welcoming them in part because of their role in reducing parental and other adult authority. Children in many societies have become prime consumers of global goods, whether rock music or fast food. Global symbols like Disney, blue jeans, or Coca-Cola provide some currency for a global youth culture quite different from the more traditional cultures of older generations. Interestingly, even as Western and international agencies express concern about the sexual exploitation of children, consumer cues often emphasize the sexuality of older children—another tension in the modern global mix, and one that inspires resistance

from more traditional sectors eager to defend customary modesty.

These changes, accelerating in the first years of the twenty-first century, do add up to a tidy package. Some modern global forces put new pressures on children, particularly in some of the world's poorer regions. Despite diversities, something of a fundamental redefinition of childhood has been under way for more than a century, affecting how children can define their roles and how adults perceive them.

Peter N. Stearns

Further Reading

- Ariès, P. (1965). *Centuries of childhood* (R. Baddick, Trans.). New York: New Vintage Books.
- Fass, P. (Ed.). (2003). *Encyclopedia of the history of childhood*. New York: MacMillan.
- Hanawalt, B. (1993). *Growing up in medieval London: The experience of childhood in history*. New York: Oxford University Press.
- Heywood, C. (1988). *Childhood in nineteenth century France*. New York: Cambridge University Press.
- Pollock, L. (1983). *Forgotten children: Parent-child relations from 1500 to 1900*. New York: Cambridge University Press.
- Sargent, C., & Scheper-Hughes, N. (Eds.). (1998). *Small wars: The cultural politics of childhood*. Berkeley and Los Angeles: University of California Press.
- Scheper-Hughes, N. (1987). *Child survival: Anthropological perspectives on the treatment and maltreatment of children*. Dordrecht, Netherlands: Kluwer.
- Stearns, P. N. (2002). *Consumerism in world history*. London: Routledge.

China

The People's Republic of China not only has the world's largest population, but also occupies territory with the longest continuous culture in history. The longevity and distinctiveness of Chinese civilization, combined with the persistence of an imperial political system over two millennia, give China a high profile in world history. Many observers within and outside China identify historical continuities and characteristics considered constant over centuries. This approach allows analysts to isolate features of the Chinese past deemed different from

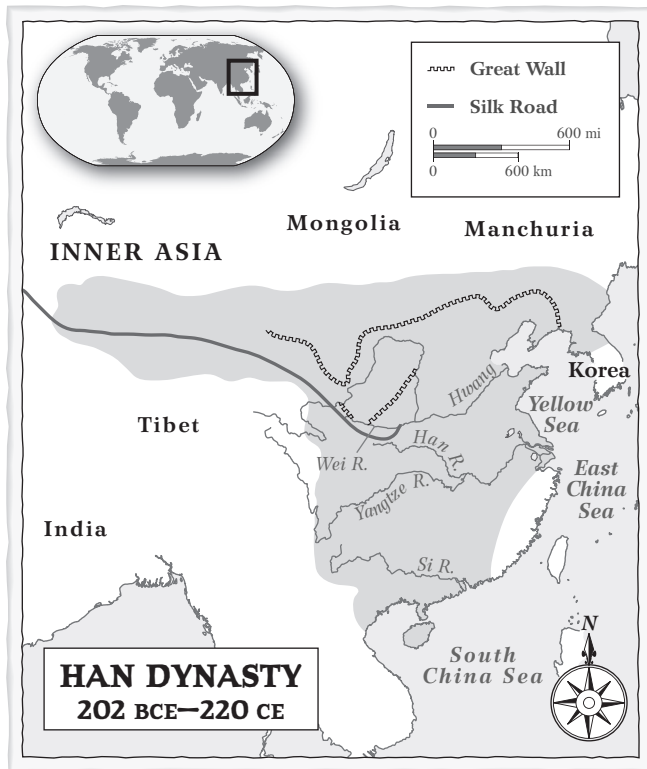
those found in Europe, though usually at the cost of being unable to explain historical change. Empire becomes the implicit and natural norm for Chinese history that requires little explanation.

Yet the continuity of empire was by no means obvious or necessary. The scale of territory controlled by succeeding dynasties expanded and contracted; rulers of various cultural backgrounds and geographical origins ruled in different eras. Dramatic social, economic, and religious changes took place through the centuries. China's imperial political system did not have to survive these many changes to give definition and shape to an entire civilization, and there are reasons the empire did repeatedly reemerge, a historical fact that has had important consequences for the recent past and the present.

Early States

The first Chinese state, the Shang, began around 1500 BCE on the North China Plain. It created walled communities, utilized writing, and extracted resources from common people to build an army. The Shang kings extended their power by incorporating groups of walled towns and villages; they worshipped their own royal ancestors and tolerated the local spirits and cults of the people who came under their rule. The state was a chain of settlements with no real bureaucracy integrating them into one unified system.

Around the mid-eleventh century BCE, the Shang was conquered by a former ally, the Zhou. Initially the Zhou distributed to its allies their own territories from the new areas that the expanding Zhou kingdom brought under its control. Once it became unable to expand its territory further, the Zhou's power gradually declined; its allies began to identify less with the Zhou rulers and to assert instead their own identities and authority. By the eighth century BCE, the Zhou allies were competing with each other militarily as they sought to conquer peoples outside the Zhou realm. Competition among increasingly separate states gained momentum as improvements in agricultural production and military technology allowed the formation of larger and more sophisticated military forces. By the third century BCE only a handful of states



remained, as others had either submitted to those more powerful than themselves or been defeated militarily. This so-called Warring States period came to a close in 221 BCE, when the state of Qin subdued an alliance of enemy states and unified a vast area that they subjected to a common administration with a common written script and common weights and measures, thus forming the first true Chinese empire.

Persistent Empire

The Qin dynasty did not survive much longer than its first emperor, whom people resented for the heavy burdens he placed on them through large public works projects; the second Qin emperor ruled for only three years before his empire fell. The succeeding Han dynasty lasted four centuries and created many of the basic institutions that provided a durable foundation for imperial rule. But the government proved unable to control the challenges posed by the new landed elite that emerged during a period of extended peace and stability. Powerful families built up their own local networks of power and authority, undermining the central government's capacity to rule. During this period, great cultural changes also took place, the most important of which was the introduction of Buddhism, which gave rulers symbols of divine

authority and a new spiritual world for common people to embrace.

With the collapse of the Han dynasty in the third century CE, a system of competing states emerged once again. The most successful were those that combined bureaucratic administration of the peasants, based on Han dynasty practices, with military forces drawing on the skills of nomadic tribes. One such state, the Sui dynasty (581–618 CE) first unified the north and then, in 589 CE, conquered the south. Like the Qin dynasty, it lasted only a few decades, and it was followed by the Tang dynasty (618–907 CE). Like the Han dynasty, the Tang lasted for centuries, with more effective powers in the first half of its rule. Early in its existence, the Tang state issued land in the north to families who agreed to serve in the military, thus building up its border defenses and its agricultural tax base. The state allowed Buddhist and Taoist temples to flourish; Buddhist temples in particular built up large tax-exempt estates, a status they later lost when officials grew concerned about their social influence and needed more temple resources for military operations.

Tang political and religious practices influenced both Japanese and Korean visitors, who adopted the Chinese writing system, the Chinese legal code, and Buddhism. As Chinese influences spread further east, the Tang empire opened itself to cultural influences from Inner Asia and lands further to the west along the Silk Roads. The Tang capital of Changan (today Xi'an) was home to merchant communities (from what is today Iran) with believers of diverse religions, including Islam, Manichaeism, and Nestorian Christianity. Until the mid-eighth century CE, the Tang succeeded in creating a vibrant and dynamic empire connected to peoples east and west. But the empire depended upon the loyalty of its generals, the most powerful of whom, An Lushan, eventually mounted a challenge to the court. The ensuing civil war deeply weakened the government, and though the dynasty survived, power became decentralized. This led to the dynasty's fall and the reemergence of multiple states in the early tenth century CE.

China was composed of multiple states for over three



Children in Communist China are moved by an unseen speaker.

have become a set of distinct states with different economic and social profiles. There could have been commercially strong lower Yangzi and military regimes depending on peasant support in the north, contrasting with each other a bit like British and German states would a few centuries later. This did not happen because the Mongols came and conquered all the rulers controlling different sections of the empire.

Mongol Rule (1279–1368)

The Mongols are significant to the course of Chinese history in two ways. First, they reunified the northern and southern portions of the Tang empire, allowing the continued development of a common culture with a shared political vision and strategies for organizing society. Second, the

centuries. Within this multistate arrangement, the Song dynasty (960–1279) is considered by traditional Chinese historians the main successor to the Tang dynasty. Throughout its existence it faced military and diplomatic challenges from the north. Unable to hold onto the North China Plain, the Song fled south, relocating its capital in the lower Yangzi region. Despite these political and military weaknesses, the Song era was one of great economic and technological advances. The expansion of a commercial economy based on increased agricultural productivity and improvements in transportation and shipping promoted the development of new towns and cities, the wealth of which exceeded that of European cities of the same period.

Political unification was not a prerequisite for economic expansion and social change. With China ruled under separate regional regimes, the former empire might

Mongols connected areas of Han China to Inner Asian territories as far west as Tibet; Mongol relations with the peoples of Inner Asia would inform Manchu approaches to ruling their empire from the mid-seventeenth to early twentieth centuries.

While Mongol rule promoted the circulation and flourishing of Confucian thought, Mongol emperors deliberately called upon other people from Inner Asia to help them rule; Muslims were sent to the southwest of the empire, while Tibetan Buddhist monks and their religion gained a prominent position at court. But Mongol success in China was limited, because their bureaucratic rule did not reach very deeply into rural society, and only the area near the capital was ruled directly by the central government bureaucracy. Unable to stabilize Chinese domestic order the Mongols retreated to the steppe after ruling China for less than ninety years. Because they had previ-

ously destroyed any military competition from the steppe, a native Han Chinese dynasty, the Ming (1368–1644 CE) could come to power and rule over an empire that had been divided among several states only a century before.

The Ming Dynasty (1368–1644)

The Ming ruled a much smaller collection of territories than the Mongols had; they did not attempt to rule any part of the steppe. They shifted their dynamic of expansion in a different direction, seeking to gain political recognition for the empire from distant places through massive maritime expeditions. Between 1405 and 1431, seven expeditions—the largest containing some three hundred ships and the smallest, forty to fifty—embarked on journeys reaching ports in South and Southeast Asia, some ships even reaching the east coast of Africa. These expeditions were the largest displays of naval prowess until World War I, some five centuries later. Historians mistakenly suggest that the end of these voyages meant the end of Chinese “curiosity” about foreign places and an inward turn by political leaders. In fact, political leaders turned their attention from maritime diplomacy to engagement with the far more threatening tribes in Inner Asia, one of which later succeeded in capturing the Ming emperor and holding him hostage for a year.

When government attentions shifted from the maritime south to the northern borders in Inner Asia, private merchants continued to connect south and southeast China to networks of trade reaching into not only Southeast Asia but to Europe and the Americas. The key commodity was silver, mined in the New World. Chinese demand for silver to bolster the country’s expanding money supply made it profitable for the Spanish to mine the precious metal in the Americas, and for European traders to exchange silver for Chinese silks, teas, and porcelains.

The Ming empire was not isolated and inward-looking. The government did, however, expend considerable effort on stabilizing the domestic social order. Unlike other agrarian empires such as the Ottoman or Mughal, where a decentralization of political power followed the rise of commercial elites in different locales, the Ming empire

Ibn Battuta on China

*In the extract below from *Travels in Asia and Africa: 1325–1354*, Ibn Battuta—noted Arab scholar and traveler—describes fourteenth-century China as he saw it.*

The land of China is of vast extent, and abounding in produce, fruits, grain, gold and silver. In this respect there is no country in the world that can rival it. It is traversed by the river called the “Water of life,” which rises in some mountains, called the “Mountain of Apes,” near the city of Khan-Baliq [Peking] and flows through the centre of China for the space of six months’ journey, until finally it reaches Sin as-Sin [Canton]. It is bordered by villages, fields, fruit gardens, and bazaars, just like the Egyptian Nile, only that [the country through which runs] this river is even more richly cultivated and populous, and there are many waterwheels on it. In the land of China there is abundant sugar-cane, equal, nay superior, in quality to that of Egypt, as well as grapes and plums. I used to think that the ‘Othmani plums of Damascus had no equal, until I saw the plums in China. It has wonderful melons too, like those of Khwarizm and Isfahan. All the fruits which we have in our country are to be found there, either much the same or of better quality. Wheat is very abundant in China, indeed better wheat I have never seen, and the same may be said of their lentils and chick-peas.

Source: Gibb, H. A. R. (Trans.). (1929). *Travels in Asia and Africa: 1325–1354*, by Ibn Battuta. New York: Routledge & Kegan Paul, Ltd.

remained a centralized political system. Agrarian communities had considerable de facto autonomy, but there was never the degree of political decentralization, commonly termed “feudalism,” that existed in both Europe and Japan.

Manchu rule (1644–1912)

In the opening decades of the seventeenth century, when the Ming government proved unable to sustain social order and succumbed to domestic rebellions, its demise did not spell the end of the imperial system. The Manchu

Students at the Xian Jiatong University active in the prodemocracy movement in China between March and June 1989. Depicted here is the largest demonstration the university had experienced, occurring on 4 June after news reached Xian of the Tiannamen Square Massacre in Beijing.

people, who came in from the northeast, established a new government, the Qing dynasty, that largely built upon Chinese political ideology and institutions developed in earlier centuries. Part of their success came from their commitment to implementing a Confucian social agenda that called for a combination of official and elite efforts to ensure local social stability.

The Manchus also mattered because they built upon the Mongol legacy in Inner Asia and succeeded in bringing large amounts of territory under their control that the Ming empire had not, including Tibet and the regions later known as Xinjiang, Mongolia, and Manchuria. They drew upon their common beliefs in Tibetan Buddhism and a shared language of political authority to affirm their rule over other Inner Asian groups. They recognized the distinctive characteristics of different groups living on the steppe, in contrast to their repeated efforts to promote Confucian values and practices across their agrarian empire south of the Great Wall. Acculturation to Chinese practices was limited on the steppe, but for the Manchus themselves, who had largely settled in the capital and in military units scattered across the empire, the adoption of Chinese language, foods, and customs gathered momentum during the eighteenth and nineteenth centuries. Manchu identity was preserved through participation in the banner system, a largely military registration system that became increasingly identified with only Manchus who were separated institutionally from the general population.

Empire as Communist antecedent

When the Qing dynasty fell in 1911 and the institutionally distinct identity of the Manchus lost its political foundation, the Manchus increasingly became integrated into the general population. Their empire, which had distinguished between its Inner Asian and Han Chinese com-



ponents, now became parts of a single China, at least conceptually. In political reality, no Chinese state could claim to rule the Inner Asian portions of the Qing empire before the Communists came to power in 1949.

Communist success in asserting claims over the lands once ruled by the Qing dynasty suggests an important way in which Chinese nineteenth-century confrontations with Western imperialism were quite different from the experiences of most parts of Africa and Asia where direct colonial regimes were put into place. The Qing dynasty was beset by a combination of mid-nineteenth-century rebellions and Western demands to open its ports to trade. The government succeeded in putting down the Taiping rebellion—the largest rebellion in world history, in which some 20 to 30 million people lost their lives—as well as other smaller disturbances. The government also opened its ports to foreigners, extending to them privileges and powers that compromised the state's autonomy and authority. Yet the government was not totally undermined by foreign pressures. Foreign powers did not replace the Qing government with one of their own; nor did they dismantle the empire to form several smaller countries. The Qing dynasty fell in 1911 because of political and military pressures exerted by domestic elites and foreign powers. Effective unified rule over the entire country was difficult to attempt, let alone attain, for the next nearly four decades. But the basic principle of the country's becoming once again unified on the territorial scale of the Qing empire was a commonly shared assumption and goal.

The success of the Communists in 1949 in reuniting the country depended on their ability to address challenges created by a long imperial history and a more

recent history of foreign pressure and domination. They succeeded at the second by radically reducing the foreign presence within the country, a project made easier by the U.S. decision to isolate the country in the 1950s, leaving the Chinese with the Soviet Union as its main foreign connection. The first challenge was met by a strong central government with a vertically integrated bureaucracy that succeeded in implementing an agenda for rule over agrarian society reminiscent of imperial strategies. Industrial and urban development were administered by separate bureaucracies that kept the vast majority of the population under an agrarian system of rule.

China is the only country in the world today where the government rules virtually the same territory that an earlier empire controlled. Today's political commitments to integration deploy visions of a national future that draw upon, in both conscious and unconscious ways, the achievements and difficulties of the past.

R. Bin Wong

See also Afro-Eurasia; Art—East Asia; Asian Migrations; Buddhism; Chinese Popular Religion; Confucianism; Confucius; Daoism; Genghis Khan; Han Wudi; Hong Merchants; Inner Eurasia; Islamic World; Lao Tzu; Mao Zedong; Mencius; Mongol Empire; Polo, Marco; Porcelain; Qin Shi Huangdi; Revolution—China; Revolutions, Communist; Ricci, Matteo; Silk Roads; Sima Qian; Sui Wendi; Sui Yangdi; Sun Yat-sen; Tang Taizong; Trading Patterns, China Seas; Trading Patterns, Indian Ocean; Warfare—China; Warfare—Islamic World; Warfare—Steppe Nomads; World Maps, Chinese; Yijing; Yongle Emperor; Zheng He; Zhu Yuanzhang

Further Reading

- Ebrey, P. B. (1999). *The Cambridge illustrated history of China*. Cambridge, UK: Cambridge University Press.
- Gernet, J. (1996). *A history of Chinese civilization*. Cambridge, UK: Cambridge University Press.
- Hansen, V. (2000). *The open empire: A history of China to 1600*. New York: Norton.
- Shaughnessy, E. (Ed.). (2000). *China: Empire and civilization*. Oxford, UK: Oxford University Press.
- Spence, J. (1999). *The search for modern China*. New York: Norton.

Chinese Popular Religion

The customary beliefs and practices of Chinese popular religion have constituted an integral part of Chinese civilization throughout the course of its five-thousand-year history. Even today, popular religion remains a vital force in many Chinese ethnic communities, thriving particularly in Taiwan, Hong Kong, and Southeast Asia, where it has never been actively suppressed by the political authorities. In general, the ideas and customs associated with this form of religious expression represent a syncretic popularization of the more literary and institutionalized traditions of Confucianism, Daoism, and Buddhism. Existing in relative harmony with these more established systems of belief, popular religion in China has evolved and flourished much more freely than similar folk traditions in the West, where the established religions, such as Christianity and Islam, are exclusivist and have historically suppressed heterodox religious movements.

The belief in the existence of gods and spirits (*shen*) that have power over the affairs of this world constitutes the essential feature of the differing forms of popular religion in China. These spirits are variously conceived of as the deceased members of one's family or community, as deified figures from history or literature, or as the spiritualized embodiments of natural and geographical forces. The most common form of religious practice involves the maintenance of private shrines and community temples, where the prayers and supplications of the believer are frequently accompanied by ritual offerings of food or the ceremonial burning of incense. Various forms of shamanism and divination are practiced in an effort to attain a more sympathetic union between the human and the divine and thereby discern or influence the course of one's personal or community destiny. In short, the values and aspirations that have sustained popular religion throughout the ages are those related to the survival and preservation

An individual should not have too much freedom. A nation should have absolute freedom. • SUN YAT-SEN (1866–1925)

of the family and community, along with the desire to maintain the delicate harmony and reciprocity conceived to exist between the human and spiritual realms.

Household Rituals

Ancestor worship is one of the most common rituals associated with Chinese popular religion. Dating back to the ceremonial practices of China's ancient kings, it has evolved to constitute a popular expression of the deeply rooted Confucian ethic of filial piety. Traditional Chinese households maintained a domestic altar where ancestral tablets of stone, wood, or paper were inscribed with the names of the deceased to serve as the focus of offerings made to their spirits. Today, photographs often take the place of the more traditional tablets, but the desire for blessings, along with the family's obligation to ensure its deceased members a comfortable existence in the next world, remain the primary motivation of such practices. Those that died with no descendants to maintain their ancestral rites, or who perished under particularly violent or evil circumstances, were of great concern to the community in traditional times. These "hungry ghosts," as they were known in popular legend, could resort to frightening forms of spiritual mischief if they were not properly propitiated. Many communities therefore established shrines specifically devoted to the ritual commemoration of these orphan spirits.

Another common expression of popular religion at the household level was the worship of the stove god (Zao Jun). Also dating back to very ancient times, this practice represents one of the most enduring cults associated with the Chinese folk tradition and shares many similarities to the worship of fire or kitchen gods in other traditional societies. As the benevolent preserver of the family hearth, the stove god was believed to oversee the moral conduct and ritual propriety of the family unit and to issue a yearly report on such matters to Heaven around the time of the traditional lunar new year. In this respect, the stove god was conceived of as a sort of policeman in a hierarchy of divine officials that ruled the spiritual realm just as the earthly authorities governed the affairs of this world. Worship of the stove god thus reflected the pervasive

belief in Chinese popular religion that the spiritual world was organized in a bureaucratic fashion that paralleled the centralized imperial administration of China's dynastic rulers.

Public Rituals

Many other activities associated with Chinese popular religion served as civic ritual intended to preserve social harmony, reinforce local identity, or ensure the good favor of the gods and spirits in meeting the various challenges of community survival. One particularly prevalent cult associated with this sort of community ritual was the worship of the local earth god (Tudi Gong). A small shrine for this deity was maintained in virtually every neighborhood or rural locality in China, bolstering the sense of regional solidarity so characteristic of traditional society. The earth god was believed to protect the community from the potentially evil influences of wandering ghosts or malevolent spirits (*gui*), along with overseeing and reporting the activities of those inhabiting his precinct to higher deities. Thus, like the stove god, the earth god was seen as another component of the spiritual hierarchy that constituted what one modern scholar has described as the "imperial metaphor" of popular religion.

The city god (Cheng Huang) was next highest in the rank of divine officials accorded the task of supervising the spiritual affairs of the local community. Enshrined in a temple near the center of his jurisdiction, the city god was normally depicted in the traditional robes of a Confucian scholar-official. Indeed, the various city gods were frequently associated with a deceased notable honored in local history for his righteousness and efficacy as an official of the imperial government. The city god was even believed to be in command of soldiers that could be used to enforce his divine edicts and preserve the moral integrity of the community. These soldiers were themselves the recipients of ritual offerings by the local residents, who occasionally placed small portions of simple food on the thresholds of their homes to reward them for their service and to assuage their ferocity. On key holidays or anniversaries, it was customary to physically convey the statue of the city god on an inspection tour of the



Rural Chinese participating in an ancestor worship ritual. Ancestor worship is a major component of Chinese popular religion.

region under his command. These ritual processions were often accompanied by great celebration and fanfare as the local residents reconfirmed their sense of community by organizing various festivities.

The Supreme Deity and the Influence of Daoism

The origin and essential nature of the Chinese belief in a supreme deity remains one of the most obscure and debated topics in the study of Chinese philosophy and religion. From the investigation of Shang dynasty (1766–1045 BCE) oracle bone inscriptions dating back to the second millennium BCE, it is clear that the Chinese considered Shangdi (“Ruler on High”) to be the supreme god of the spiritual realm. Because of its awesome and overwhelming powers, this deity could not be supplicated directly, and the divinatory practices of the Shang kings normally consisted of calling upon the spirits of deceased royal ancestors to intercede with Shangdi on their behalf. In the centuries that followed, this supreme deity became increasingly referred to as Tian (“Heaven”) and was regarded somewhat more abstractly, and in a less personified manner, than in earlier times. During the Zhou dynasty (1045–256 BCE), the Chinese ruler became formally regarded as the Son of Heaven (Tianzi), a develop-

ment that permanently linked the imperial institution with the chief deity of the spirit world. Thus, throughout most of Chinese history, the ruler was regarded as the primary intermediary between Heaven and Earth, and only he was permitted to worship or implore Heaven directly.

From the time of the Northern Song dynasty (960–1126 CE), the supreme deity of the Chinese has been popularly conceived of as the Jade Emperor (Yu Huang Shangdi), the supreme ruler of the heavens and the underworld and the protector of mankind. According to Daoist legend, the Song emperor Zhen Zong (968–1022; reigned 997–1022) experienced a visitation from the Jade Emperor in a dream, afterwards proclaiming himself the deity’s incarnate descendant. This official acknowledgement of the Jade Emperor placed the god at the pinnacle of the Chinese pantheon and formally sanctioned the popular conception of an elaborate bureaucratic order in the spiritual world that paralleled the imperial institutions of the world below. In Chinese popular religion, the Jade Emperor reigned supreme over all the Daoist, Buddhist, and other popular deities of traditional lore in addition to commanding the various spiritual forces of the natural world. Approached primarily through intermediaries, the Jade Emperor was often implored by the common people for good harvests and

A Chinese city god, one of many gods worshipped in Chinese popular religion.

protection against natural calamities. He was also turned to for the remission of sins, in the hope that his pardon, as the ruler of the underworld, would secure a more favorable afterlife. This popularized conception of the supreme deity was, therefore, less abstract and more accessible to the masses than the Tian associated with classical Confucianism.

Many of the deities associated with Chinese popular religion, including the Jade Emperor, are derived from the various sects of folk (or religious) Daoism that emerged during and following the Han dynasty (206 BCE–220 CE). Differing significantly from the philosophical Daoism of the earlier classical tradition, folk Daoism placed great emphasis upon mastering the sublime forces of the natural and spiritual worlds with the ultimate goal of attaining everlasting felicity and physical immortality. Daoist immortals (*xian*) therefore became the primary subjects of religious veneration, and their individual stories provided the legendary basis for an elaborate pantheon of divine beings. These Daoist “saints,” who collectively symbolized happiness and prosperity, included allegedly historical figures from a variety of social and occupational backgrounds, both male and female. The members of an especially noteworthy group, the Eight Immortals, were often venerated as the patron deities of various professions in a fashion quite similar to the veneration of patron saints in Western Catholicism. Daoist deities also included spiritual beings associated with the forces of nature or the agricultural cycle, such as the Lei Gong (the god of thunder), Yu Shen (the god of rain), and Feng Shen (the wind god). Daoist priests trained in the esoteric traditions of their sect were often called upon in times of drought or other natural calamities to perform rituals of exorcism to rid a region of malevolent spirits or to conduct magical ceremonies to restore harmony to the natural forces.

Buddhist Influences

Folk Buddhism was another source of many of the deities and ideas incorporated into Chinese popular religion. The most popular among these are drawn from the



Mahayana Buddhist belief in bodhisattvas, supremely compassionate beings that have postponed their attainment of nirvana for the sake of assisting all others in the quest for spiritual salvation. The female bodhisattva Guanyin (called the goddess of mercy) was by far the most widely worshipped of these spiritual beings. Often supplicated in times of personal loss or tragedy, Guanyin was regarded as a benevolent savior for the masses, who in her infinite compassion would never fail to rescue or console her sincere devotees. Statues of Guanyin could be found in many Buddhist shrines and temples throughout China, and households frequently maintained her image on their domestic altar. The spiritual comfort of turning toward the loving goddess Guanyin has many parallels to the deep devotion directed toward the Virgin Mary in Western Catholicism.

Folk Buddhism also influenced popular beliefs pertaining to life after death. One of the most essential features of popular religion in China is belief in a divine system of rewards and punishments, in which departed individuals are judged according to their merits in this life and sent either to a blissful abode in heaven or a tormenting corner in hell. These visions of heaven and hell, along with other notions regarding ghosts and the afterlife, have served for centuries as one of the most creative subjects in Chinese art and storytelling. In short, popular religion in China has assimilated many of the concepts and deities central to both the Buddhist and Daoist traditions, informally combining and transforming them in a manner that has stimulated and inspired the popular imagination throughout Chinese history.

Tradition of Syncretism

The enduring appeal of popular religion among many ethnic Chinese communities around the world testifies to its lasting importance as a conveyor of China's accumulated cultural traditions. By incorporating, in syncretic fashion, key elements of the country's diverse religious and philosophical traditions, it has consistently served to bring a measure of cultural harmony to potentially conflicting systems of belief. Popular religion in China thus illustrates the inherent tolerance and flexibility of Chinese civilization at the level of folk culture. Thus, while sharing some notable similarities with the veneration of saints and other aspects of popular religion in the West, Chinese popular religion has enjoyed a freer course of evolutionary development and has, therefore, more readily assimilated and preserved the diverse influences that have contributed to Chinese civilization throughout its long history.

Michael C. Lazich

Further Reading

- Boltz, J. (1987). *A survey of Taoist literature: Tenth to seventeenth centuries*. Berkeley and Los Angeles: University of California Press.
- Bosco, J., & Ho, P.-P. (1999). *Temples of the Empress of Heaven*. Cambridge, UK: Oxford University Press.
- Chard, R. (1990). Folktales on the god of the stove. *Chinese Studies*, 12(1), 149–182.
- Dean, K. (1995). *Taoist ritual and popular cults of southeast China*. Princeton, NJ: Princeton University Press.
- Dell'Orto, A. (2002). *Place and spirit in Taiwan: Tudi Gong in the stories, strategies and memories of everyday life*. London: RoutledgeCurzon.
- Feuchtwang, S. (2001). *Popular religion in China: The imperial metaphor*. Richmond, Surrey, UK: Curzon Press.
- Henderson J. (1984). *The development and decline of Chinese cosmology*. New York: Columbia University Press.
- Johnson, D. (Ed.). (1995). *Ritual and scripture in Chinese popular religion: Five studies*. Berkeley, CA: The Chinese Popular Culture Project.
- Kieckhefer, R., & Bond, G. D. (1990). *Sainthood: Its manifestations in world religions*. Berkeley and Los Angeles: University of California Press.
- Lagerwey, J. (1987). *Taoist ritual in Chinese society and history*. London: Collier Macmillan.
- Ma, X., & Seiwert, H. M. (2003). *Popular religious movements and heterodox sects in Chinese history*. Leiden, Netherlands: Brill Academic Publishers.
- Sangren, P. S. (1987). *History and magical power in a Chinese community*. Stanford, CA: Stanford University Press.
- Saso, M. (1985). Vernacular and classical ritual in Taoism. *Journal of Asian Studies*, 45(1), 21–57.
- Shahar, M., & Weller, R. (1996). *Unruly gods: Divinity and society in China*. Honolulu: University of Hawaii Press.
- Shahar, M. (1998). *Crazy Ji: Chinese religion and popular literature*. Cambridge, MA: Harvard University Press.
- Stevens, K. G. (2001). *Chinese mythological gods* (Images of Asia Series). Oxford, UK: Oxford University Press.
- Teiser, S. F. (1996). *The ghost festival in medieval China*. Princeton, NJ: Princeton University Press.
- Weisgrau, M. K., & Klass, M. (Eds.). (1999). *Across the boundaries of belief: Contemporary issues in the anthropology of religion*. Boulder, CO: Westview Press.
- Weller, R. (1987). *Unities and diversities in Chinese religion*. London: Macmillan.

Churchill, Winston

(1874–1965)

BRITISH STATESMAN

Sir Winston Spencer Churchill, British politician and writer, is best known as his country's prime minister during World War II. In 1940, when Britain looked defeated, he defiantly rejected any deal with Nazi Germany. Determined to fight on, he inspired his people with oratory that called them to be heroes. At the time of supreme crisis, he promised nothing "but blood, toil, tears, and sweat."

Churchill's lifetime spanned a period that began when Britain's prestige was near its peak and ended when Britain had fallen to the level of a second-rank power and its empire had broken up. Churchill enjoyed a long, multifaceted, and sometimes controversial career. It started in the 1890s when he was a glory-seeking cavalry officer and journalist in India and concluded in the 1950s when as an old man he headed the British government in the first decade of the Cold War. In 1953 the queen knighted him, and ten years later the United States president made him the first honorary American citizen.

Egocentric, energetic, and extravagant, Churchill often appeared larger than life. Although short in stature and

Vincent Sheean: Valediction to Churchill

U.S. journalist Vincent Sheean wrote this article for The New Republic about Winston Churchill when Churchill lost the general British election of 1945.

As for Mr. Churchill himself, as he passes from history into literature, one's sense of fitness leads to the hope that some special honorific distinction will mark the event. In the old days it was possible for the nation to bestow a "purse," a great sum of money or huge pension awards, on those who had served it exceptionally well. That is how the Nelsons and the Wellingtons and Marlboroughs were able to weigh the nation's gratitude. The fashion has changed and this may no longer be possible; if it were, there are many nations which should contribute heavily to that "purse." But one traditional expression remains which suits Mr. Churchill's habit of mind and life: he can be a duke. For my part, if I had the doing of it, I would have him called both marshal and king, since those words are so powerful an object of his respect: but owing to the fact that they still have functioning attributes in England the notion is not practical. Duke, therefore, let it be: but not merely duke of London or of any other geographical entity, however considerable. The exuberant Italians had a way, at the end of the last war, of making their great men dukes of the elements- "Duke of the Sea," for instance. For Mr. Churchill nothing less would be wholly appropriate: he could be Duke of the Channel which he made freedom's frontier for those twelve long months, or he could be duke of the burning deck, or duke of the air. Whatever he calls himself, he will always be the duke of the dark days, and since there are not likely to be any more winners or wearers of such a title, he might as well assume it in memory of June, 1940. Where the truth lies let the name lie also.

Source: Sheean, V. (1946). Valediction to Churchill. *The New Republic*.

unathletic in build, he seemed a giant. His image was that of a jaunty, confident, cigar-smoking, hard-drinking, bulldog-obstinate John Bull. Few people knew that he suffered from debilitating bouts of depression that he called his "black dog." Other than his wife Clementine, he had few close friends.

By birth, Churchill was an aristocrat, although without a personal fortune. Like most boys of his social class, he grew up spending more time with his beloved nanny than with his aloof parents. His politician father, Lord Randolph Churchill, was a younger son of the Duke of Marlborough. His mother, born Jennie Jerome, was the glamorous daughter of a wealthy American. After doing poorly at Harrow school, the young Churchill attended the military academy at Sandhurst.

Churchill's time as an army officer was brief. He saw combat on the Indian frontier and in the Sudan, was a military observer in Cuba during conflict between Spanish troops and nationalist rebels, and during the South African (Boer) War was taken prisoner by the Boers and escaped. Except for a few months during the First World War when he commanded a battalion in France, he was a civilian the rest of his life, but a civilian who by holding political office commanded navies and armies.

In 1900 Churchill was elected to the House of Commons as a member of the Conservative Party. Objecting to Conservative proposals for protective tariffs, he soon switched to the Liberal Party, which defended free trade. The renegade Churchill was rewarded with increasingly important offices, beginning with the number two position in the ministry for colonies. He earned a reputation as a social reformer while president of the Board of Trade and home secretary. Shortly before the outbreak of World War I he became first lord of the admiralty. The failure in 1915 of a naval attack on Ottoman Turkey, followed by a disastrously unsuccessful land invasion at Gallipoli, led to Churchill's resignation. Demoted to the office of chancellor of the Duchy of Lancaster, he soon left the government altogether. Two years later he returned to high office as minister for munitions. Subsequently, he served his friend Prime Minister David Lloyd George as

It is a mistake to try to look too far ahead. The chain of destiny can only be grasped one link at a time. • WINSTON CHURCHILL (1874–1965)

secretary of state for war and air and as colonial minister. Lloyd George's coalition government fell in 1922. By this time, the Liberal Party was divided and dying. Churchill made his way back to the Conservative Party. Prime Minister Stanley Baldwin was generous to the returning prodigal: Churchill served as chancellor of the exchequer from 1924 to 1929. This would be the last office he would hold for a decade. A multiparty national government dominated by the Conservatives, which came to power in 1931, kept Churchill on the back benches.

In the 1930s Churchill took positions that undermined his credibility. He led the fight against Baldwin's proposal to grant India a large degree of political self-government. Churchill was determined to preserve the integrity of the British empire. When Edward VIII insisted on marrying a divorced American woman, Baldwin and the leaders of the other political parties demanded that the king abdicate. In contrast, Churchill wanted the king to keep his crown. Such eccentric policies isolated Churchill. He was regarded as impetuous and unreliable. This reputation made it difficult for Churchill to get a hearing when he warned about German rearmament and fiercely attacked appeasement of Adolf Hitler.

Nazi Germany's invasion of Poland in 1939 vindicated Churchill. He was reappointed first lord of the admiralty. When the war went badly, Prime Minister Neville Chamberlain resigned, and Churchill at age sixty-five replaced him. He assumed this office on the day that the German armies began their successful invasion of France and the Low Countries. After France sued for peace, Britain had no major allies until 1941, when Germany invaded the Soviet Union and Japan attacked United States possessions in the Pacific. Churchill took an active role in planning military campaigns. Remembering the enormous casualties of World War I, he favored a Mediterranean strategy and delayed a cross-Channel invasion of Nazi-occupied France. Despite his age and the discomfort of World War II aircraft, Churchill traveled frequently to confer with other political leaders. In addition to meetings with President Franklin Roosevelt in North America, he participated in other so-called summit conferences at

Casablanca, Cairo, Teheran, and Yalta. Although fiercely anti-Communist, he developed a working relationship with the Soviet leader, Joseph Stalin.

Churchill's party lost the general election held in 1945. Although he was over seventy, his political career was not over. In 1946 he made his famous "iron curtain" speech at Fulton, Missouri, one of the defining moments that marked the beginning of the Cold War with the Soviet Union. During the 1940s Churchill favored some kind of limited economic and political unity for Western Europe. From 1951 to 1955 he again served as prime minister, retiring in his eighties.

Outside politics Churchill earned a reputation as a writer. Always in need of money, he wrote prolifically, mostly history and biography, often dictated to secretaries and researched by assistants. Some of his books first appeared serialized in newspapers. His most important books include a biography of his father (1906); a history of World War I entitled *The World Crisis* (1923–1931); an autobiography up to the year 1904, entitled *My Early Life* (1930); a history of his ancestor, the first Duke of Marlborough (1933–1938); a collection of biographical essays, *Great Contemporaries* (1937); *The Second World War* (1948–1954); and his *History of the English-Speaking Peoples* (1956–1958). In 1953 he was awarded the Nobel Prize for Literature.

David M. Fahey

See also British Empire; World War II

Further Reading

- Addison, P. (1993). *Churchill on the home front, 1900–1955*. London: Pimlico.
- Best, G. (2001). *Churchill: A study in greatness*. New York: Oxford University Press.
- Churchill, R., & Gilbert, M. (1966–1988). *Winston S. Churchill*. Boston: Houghton Mifflin.
- Gilbert, M. (1991). *Churchill: A life*. New York: Henry Holt.
- James, R. R. (1970). *Churchill: A study in failure, 1900–1939*. New York: World.
- Jenkins, R. (2001). *Churchill: A biography*. New York: Farrar, Straus & Giroux.
- Lukacs, J. (1999). *Five days in London, May 1940*. New Haven, CT: Yale University Press.



Moore, R. J. (1979). *Churchill, Cripps, and India, 1939–1945*. New York: Oxford University Press.

Ramsden, J. (2002). *Man of the century: Winston Churchill and his legend since 1945*. New York: Columbia University Press.

Rasor, E. L. (2000). *Winston S. Churchill, 1874–1965: A comprehensive historiography and annotated bibliography*. Westport, CT: Greenwood Press.

Church–State Law

See Islamic Law; Religion and War; Religious Freedom

Cinchona

Native to the eastern slopes of the Andes Mountains, the bark of the cinchona tree entered into the medical practice in Europe in the late sixteenth century as the cure for recurring fevers—that is, malaria. It is likely that the Incas had earlier used cinchona as a fever-reducing drug; the Spanish conquistadors are thought to have benefited from this indigenous practice when they introduced malaria from the Old World into the Americas during the course of their conquests. Popularized by the Jesuits, the use of cinchona bark increased in Western Europe over the course of the seventeenth and eighteenth centuries, eventually overcoming Protestant prejudice against the “Jesuits’ bark.” It gained a deserved reputation as a specific remedy for a particular set of physical complaints, long before the germ theory of disease.

Cinchona bark had its drawbacks, however. There were many different varieties of cinchona tree. The four principal alkaloids—that is, the organic bases containing nitrogen that had a physiological effect—varied greatly among the barks. Furthermore, the bark was difficult to stomach; Europeans generally took it mixed with wine.

From 1820 onward, after the successful isolation of the cinchona alkaloids of quinine and cinchonine by the French chemists P.-J. Pelletier and J.-B. Caventou, the demand increased for cinchona bark as the raw material

for quinine, which became the most popular form of anti-malarial medicine. Malaria was widespread in both the Old World and the New World, and new chemical manufacturing companies in North America and in Western Europe sprang up to transform cinchona bark into the more easily digestible, alkaloidal forms of the antimalarial medicine. Andean specialists known as *cascañillos* harvested the bark, and the demand was such that new roads were cut into the remote highlands of Bolivia, Ecuador, and Peru, and new towns were established to handle exports. The Andean harvesting methods, however, involved stripping off the bark, which killed the trees and ultimately put the future of the extractive industry at risk.

By the mid-nineteenth century, Europeans became increasingly concerned about the prospects for a continuing supply of cinchona bark from the Andean highlands. As Europeans embarked on their second great colonial expansion in the middle of the nineteenth century, the administrators of European empire laid plans to create a cinchona plantation industry within the Asian tropics. Thus began one of the great imperial European botanical ventures of the nineteenth century.

After Dutch failures in the 1850s to establish cinchona on Java in the South Pacific, in the early 1860s the British introduced cinchona to the Nilgiri Hills in southern India and to the highlands of Ceylon (Sri Lanka). These experiments were successful with two varieties known as *Cinchona succirubra* and *C. officinalis* that grew at different elevations. But these sizable efforts were then largely eclipsed by the dogged experimentation of the Dutch managers on Java, who procured seeds of another subvariety of cinchona known as *C. ledgeriana*. The Dutch experimenters sampled the alkaloid contents of the barks of individual trees, and then destroyed all but the highest yielding. They also undertook an agronomic program of grafting high-yielding *C. ledgeriana* on to the hardier *C. succirubra* stocks. By the late nineteenth century, a large majority of the world’s supply of cinchona bark was produced under the auspices of the Dutch on Java. The British cinchona plantations in India continued to produce bark for antimalarial medicines to be consumed within British India. Other European imperial

powers—notably the French and the Germans—also set up cinchona plantations in Africa and in Southeast Asia, but these plantations produced relatively small amounts of bark, destined for the colonial tropical markets.

The demand for cinchona bark to make antimalarials was erratic. Malaria was a global health problem, but the antimalarials were expensive, and North Americans and Western Europeans made up the lion's share of the market. Demand spiked during epidemic outbreaks and then receded. Plantation owners on Java often found themselves with an oversupply of cinchona bark, and when the price plummeted, some were forced out of business. The survivors of these market paroxysms entered into cartel agreements in a series of attempts to stabilize the global price of the bark.

During the 1920s, plantation owners and cinchona brokers formed an international cartel known as the Kina (the Dutch word for cinchona) Bureau, based in Amsterdam. It set the prices for producers and purchasers. In 1942, the Japanese conquered the Dutch East Indies and seized control of the cinchona plantations, severing the Allies' supply and provoking experimentation with other natural and synthetic anti-malarials. After the war, the cinchona plantations on Java were reestablished, but the new synthetic anti-malarials, such as chloroquine, had come to replace most of the demand for quinine from cinchona.

James L. A. Webb, Jr.

See also Malaria

Further Reading

- Duran-Reynals, M. L. (1946). *The fever bark tree: The pageant of quinine*. Garden City, NY: Doubleday.
- Gramiccia, G. (1988). *The life of Charles Ledger (1818–1905): Alpacas and quinine*. Basingstoke, UK: Macmillan.
- Honigsbaum, M. (2001). *The fever trail: In search of the cure for malaria*. New York: Farrar, Straus & Giroux.
- Jarco, S. (1993). *Quinine's predecessor*. Baltimore: Johns Hopkins University Press.
- Taylor, N. (1945). *Cinchona in Java: The story of quinine*. New York: Greenberg.
- Webb, J. L. A., Jr. (2002). *Tropical pioneers: Human agency and ecological change in the highlands of Sri Lanka, 1800–1900*. Athens: Ohio University Press.

Cities

See Agrarian Era; Urbanization; World Cities in History—Overview

Citizenship

The core meaning of *citizenship* is membership in a community. Beyond that core meaning, conceptions of citizenship have changed greatly over time and place, as to the nature both of the community and of the membership in question. Classically and enduringly, citizenship has been about a *political* and often a *legal* relationship: A citizen is a member of a polity by virtue of reciprocal rights and duties shared in common. As a membership status and as a behavioral norm, then, citizenship bespeaks an equality of citizens; but citizenship also thus entails inequality, in distinguishing citizens from noncitizens.

Classical Origins

The historic origins of citizenship lie distinctively in ancient Greece and Rome. Unlike the advanced civilizations that developed in the river valleys of ancient Mesopotamia, Egypt, and China, the classical civilizations of Greece and Rome were founded on the primacy of the city-state regime. The city-state (*polis*) of fourth-century BCE Athens produced the first classic theorist of citizenship, Aristotle (384–322 BCE), who expounded Athenian citizenship as a matter of “democratic” self-governance, with citizens (*polites*) at once “ruling and being ruled.” Notably, however, most of the adult inhabitants of Athens—women, slaves, and even resident aliens such as Aristotle himself—were not eligible for citizenship. Citizenship was thus a privileged legal status and a restricted participatory civic ideal. In the Roman republic, with its earliest territorial expansions in the fourth century BCE, the government began to extend the status of the citizen (*civis*) far beyond the city of Rome itself, in order to secure Roman rule. Expansions of the republic,

however, increasingly precluded an active political role for most citizens, who had no opportunity to participate in the institutions of government, which remained centered in Rome. Even in the late republic of the first century BCE, however, an ideal of “civic virtue”—of the citizen’s devotion to the polity—shaped Roman public culture, as exemplified in the classic legacy of the philosopher, politician, and lawyer Marcus Tullius Cicero (106–43 BCE). During the ensuing centuries of the Roman Empire, however, citizenship became principally a formal matter merely of imperial jurisdiction and administration. With the decline of centralized imperial rule in the fourth and fifth centuries CE, the classical idea of citizenship went into eclipse.

Medieval Eclipse and Neoclassical Renaissance

During the medieval period it was not only the collapse of centralized government that diminished the significance of citizenship in the European West; the rise of Christianity brought a profound challenge to the classical primacy of citizenship as a societal ethos. According to the great Church father Augustine (354–430 CE), in his masterpiece of Christian cosmology *The City of God*, men’s allegiance to a “heavenly realm” posed a superseding alternative to all earthly allegiances. Furthermore, throughout medieval Europe the growth of feudalism brought regimes of decentralized government based on networks of inherently fragmented political allegiances. Citizenship, as it had in Athens, once again came to refer typically to association with a city or town. Citizenship meant the enjoyment of “liberties” as privileges or immunities granted to the members of a local urban community in its corporate capacity, for example, the English borough, the French *bourg*, and the German *burgh*.

The revitalization of urban life in parts of Europe eventually brought enhanced meaning to citizenship, notably among the preeminent city-states of Renaissance Italy. The commercial and civic vitality of such cities and the revival of the study of Roman law in leading universities fostered a neorepublican ideal of participatory citizenship. This neoclassical conception of citizenship in early

modern Europe was elaborated in a rich literature of “civic humanism,” most famously, from the pen of the Florentine politician and scholar Niccolò Machiavelli (1469–1527).

Sovereignty, “Civil Society,” and Revolutions

Dating from the early modern era, the rise of powerful nation states found legitimation in cogent theories of monarchical sovereignty, such as those of Jean Bodin (1530–1596) and Thomas Hobbes (1588–1679). Such theories held that political identity lay in the direct personal relationship of every “subject” to the “sovereign.” Even in regimes of absolute monarchy, however, modern individual identity tended over time to become more than a matter of the political status of the “subject.” Commercial development brought increasing political and extrapolitical significance to individuals’ economic and social endeavors in the milieu of “civil society”; and the activities of civil society promoted attitudes of citizenship that supplemented and complemented the civic identity of the “subject.” This incremental reconception, from “passive subject” to “active citizen,” was also promoted by the very statism of centralizing national regimes, not least, for example, in their efforts to routinize general taxation. But, even more important, in England, America, and France, respectively, revolutionary neorepublicanism generated profound reconceptions of citizenship.

In reaction to absolute monarchy, including struggles for religious toleration and freedom, notions of popular sovereignty began to cohere in various theories of rights, whether legal or natural, that focused on the political importance and integrity of the individual. In England among the propertied elite, there emerged a developing political culture of individual “patriotic” vigilance against arbitrary government that climaxed in antimonarchical revolutions in the seventeenth century and that became institutionalized in the eighteenth. During the European Enlightenment more generally, various “social contract” theories accorded an essential civic role to the individual, for example, in Jean-Jacques Rousseau’s (1712–1778) morally impassioned vision of the *citoyen* as the indi-

Voting is the least arduous of a citizen's duties. He has the prior and harder duty of making up his mind. • RALPH BARTON PERRY (1876–1957)

vidual constituent of “sovereign” government, and in Immanuel Kant’s (1724–1804) seminal philosophy of modern liberal individualism.

It was, however, in the late-eighteenth-century republican revolutions in America (1776–1783) and France (1789–1799) that modern democratic conceptions of citizenship were first constitutionalized and institutionalized. Drawing on but also transforming English constitutionalism, the new American nation reconceptualized citizenship as a matter of the constitutionally guaranteed fundamental legal rights of individuals. And American law increasingly emphasized the central idea of volitional allegiance as the essence of citizenship. An American law of naturalization, even more liberal than its English precedents, thus developed to supplement the long-standing tradition of citizenship as a status typically acquired on the basis of birthplace (*ius soli*) or parentage (*ius sanguinis*). Inspired in part by the American Revolution, the epochal French Revolution, in its natural rights theory, exalted the ethos of citizenship. Moreover, the distinctively antifeudal animus of the French Revolution infused subsequent European ideals of citizenship both with intensified nationalistic sentiments and with burgeoning aspirations for social and economic equality.

Nationalism and Twentieth-Century Vicissitudes

The nationalism and egalitarianism of the French Revolution, together with the individual-rights ideology of American constitutionalism, shaped ideas of citizenship throughout the Western world for most of the nineteenth and twentieth centuries. Especially in parts of Europe, identities based on race or folkways variously informed ideas of citizenship. Such particularization of the concept of citizenship accorded with the historicism predominant in much European thought, especially as influenced by Georg Wilhelm Friedrich Hegel (1770–1831). At the same time, however, the egalitarian dynamic in citizenship took on increased meaning, especially insofar as representative democratic regimes fitfully expanded the scope, and extended the distribution, of the legal rights of citizens. Amid this growth of representative

government, the right to vote became especially emblematic of modern citizenship.

Nevertheless, in addition to the inequality entailed by the distinction between citizen and noncitizen—for example, in national legal regimes of immigration restriction and regulation—modern citizenship has admitted of egregious internal inequalities. In various countries, attributes such as gender, race, and religious affiliation have long into the modern era remained the basis for denying to many adult members of society some of the most important incidents of full citizenship, including property rights and the right to vote. Even more pervasively, according to the critique of Karl Marx (1818–1883) and many later variants of Marxian theory, the economic regimes of capitalism of the modern West have commonly institutionalized a model of “bourgeois citizenship” that, despite incidents of formal equality, nevertheless entails profound material inequality among the citizenry.

In the first half of the twentieth century, totalitarian revolutions and two world wars brought cataclysmic disruptions of the emergent culture of modern liberal democratic citizenship. As Hannah Arendt (1906–1975) and others began to remark at midcentury: Modern citizenship has importantly come to mean the right to have rights; but in various contexts—for example, under the government of fascist or communist dictatorships, and, quite differently, among certain stateless and disaffected populations living without the protections of effective government—the personal guarantees of liberal democratic citizenship have at times been marginalized or rendered nil.

The Modern Welfare State and Liberal Democracy

In the aftermath of World War II, especially in conjunction with a European reinvigoration of the modern welfare state vision, there was a return to politically engaged theorizing about the progressive capability of the concept of citizenship. Formative work in this vein includes the classic article “Citizenship and Social Class” published in 1950 by T. H. Marshall (1893–1981). Marshall posited an historical schema of the development of the rights of

Citizenship: The U.S. Naturalization Exam

Applicants for naturalized U.S. citizenship must pass a basic civics exam. Below are sample questions from the U.S. citizenship test. Applicants may get several questions wrong and the entire process takes roughly ten minutes.

1. What are the colors of the flag?
2. How many stars are there in our flag?
3. What color are the stars on our flag?
4. What do the stars on the flag mean?
5. How many stripes are there in the flag?
6. What color are the stripes?
7. What do the stripes on the flag mean?
8. How many states are there in the union (United States)?
9. What is the 4th of July?
10. What is the date of Independence Day?
11. Independence from whom?
12. What country did we fight during the Revolutionary War?
13. Who was the first president of the United States?
14. Who is the president of the United States today?
15. Who is the vice president of the United States?
16. Who elects the president of the United States?
17. Who becomes president of the United States if the president should die?
18. For how long do we elect the president?
19. What is the Constitution?
20. Can the Constitution be changed?
21. What do we call a change to the Constitution?
22. How many changes or amendments are there to the Constitution?
23. How many branches are there in our government?
24. What are the three branches of our government?
25. What is the legislative branch of our government?
26. Who makes the laws in the United States?
27. What is Congress?
28. What are the duties of Congress?
29. Who elects Congress?
30. How many senators are there in Congress?
31. Can you name the two senators from your state?
32. For how long do we elect each senator?
33. How many representatives are there in Congress?
34. For how long do we elect the representative?
35. What is the executive branch of our government?
36. What is the judicial branch of our government?
37. What are the duties of the Supreme Court?
38. What is the supreme law of the United States?
39. What is the Bill of Rights?
40. What is the capital of your state?
41. Who is the current governor of your state?
42. Who becomes president of the United States if the president and the vice president should die?
43. Who is the chief justice of the Supreme Court?
44. Can you name the 13 original states?
45. Who said, "Give me liberty or give me death"?
46. Which countries were our principal allies during World War II?
47. What is the 49th state of the Union (United States)?
48. How many terms can a president serve?
49. Who was Martin Luther King Jr.?
50. Who is the head of your local government?
51. According to the Constitution, a person must meet certain requirements in order to be eligible to become president. Name one of these requirements.

52. Why are there 100 senators in the Senate?
53. Who selects the Supreme Court justices?
54. How many Supreme Court justices are there?
55. Why did the Pilgrims come to America?
56. What is the head executive of a state government called?
57. What is the head executive of a city government called?
58. What holiday was celebrated for the first time by the American Colonists?
59. Who was the main writer of the Declaration of Independence?
60. When was the Declaration of Independence adopted?
61. What is the basic belief of the Declaration of Independence?
62. What is the national anthem of the United States?
63. Who wrote the Star-Spangled Banner?
64. Where does freedom of speech come from?
65. What is the minimum voting age in the United States?
66. Who signs bills into law?
67. What is the highest court in the United States?
68. Who was president during the Civil War?
69. What did the Emancipation Proclamation do?
70. What special group advises the president?
71. Which president is called the “father of our country”?
72. What is the 50th state of the Union (United States)?
73. Who helped the Pilgrims in America?
74. What is the name of the ship that brought the Pilgrims to America?
75. What were the 13 original states of the U.S. called?
76. Name three rights or freedoms guaranteed by the Bill of Rights.
77. Who has the power to declare war?
78. Name one amendment that guarantees or addresses voting rights.
79. Which president freed the slaves?
80. In what year was the Constitution written?
81. What are the first 10 amendments to the Constitution called?
82. Name one purpose of the United Nations.
83. Where does Congress meet?
84. Whose rights are guaranteed by the Constitution and the Bill of Rights?
85. What is the introduction to the Constitution called?
86. Name one benefit of being a citizen of the United States.
87. What is the most important right granted to U.S. citizens?
88. What is the United States Capitol (building)?
89. What is the White House?
90. Where is the White House located?
91. What is the name of the president’s official home?
92. Name one right guaranteed by the First Amendment.
93. Who is the commander in chief of the U.S. military?
94. Which president was the first commander in chief of the U.S. military?
95. In what month do we vote for the president?
96. In what month is the new president inaugurated?
97. How many times may be a senator be reelected?
98. How many times may a congressman be reelected?
99. What are the two major political parties in the United States today?
100. How many states are there in the United States?

It is better that a man should tyrannise over his bank balance than over his fellow citizens. • JOHN MAYNARD KEYNES (1883–1946)

citizenship in Europe in which three categories of rights—civil, political, and social—were successively ensured to citizens in an evolutionary process of legal and political reform. And in Marshall's influential view, the history of this evolutionary progress of reform attests to the inherent potential of the concept of citizenship for generalizing, indeed, universalizing conditions of substantive equality.

The concept of citizenship remains a central concern among theorists of liberal democracy. Neo-Kantians, such as John Rawls (1921–2002) in America, and “critical” theorists such as Juergen Habermas (b. 1929), have led vigorous contemporary debates about citizenship. And liberal “communitarian” theorists such as Michael Walzer (b. 1935) have focused on the idea of citizenship in trying to appreciate the integrity of discrete political communities today in an international arena in which both armed conflict and rational globalization seem endemic.

Complexities and Expansions

Indeed, nothing is more characteristic of the contemporary significance of citizenship than the evident complexity and expansibility of the concept. For example, in well-established “federal systems,” such as those of the United States and Germany, national and state governments, respectively, accord distinctive status and extend independent benefits that create “dual citizenship” in those countries. There are also countries, such as Canada and Israel, that liberally allow dual *national* citizenship with other countries. And the growing integration of the European Union has heightened interest in what “multinational” and “international” citizenship should and could mean today, legally and culturally. Moreover, there is even a vibrant new school of thought that seeks to promote both an ideal and a program of “world citizenship.”

Yet the variety of the complexities of modern citizenship includes even more than systemization through regimes of federalism, internationalism, or cosmopolitanism. In an increasingly pluralistic world, where the populations of so many countries include ethnic and

other “minorities,” citizenship can or should be necessarily “multicultural.” And conceptions of citizenship can be intercultural, as well: In China, for example, modern thinking about citizenship blends Western and Japanese influences with Buddhist and other indigenous traditions. And in but one paradoxical example of illiberal “modernization,” some newly independent southern African countries have drawn on traditional European notions of patrilineal citizenship in order to enact laws that burden women with civic disabilities that depart from precolonial regimes of greater gender equality.

In the modern West and throughout the world, the meaning of citizenship continues to change with the vagaries and initiatives of legal, political, economic, and social change. It is clear, however, that citizenship generally remains both a desired status and a cherished ideal. Indeed, the prospect for the twenty-first century is that, in a world culture of growing claims for political and social inclusion, citizenship will take on ever greater significance as a strategic concept in the public life of communities, from the smallest to the largest.

Stephen A. Conrad

See also State, The; Displaced Populations, Typology of

Further Reading

- Beiner, R. (Ed.). (1995). *Theorizing citizenship*. Albany: State University of New York Press.
- Bendix, R. (1996). *Nation-building & citizenship: Studies of our changing social order*. New Brunswick, NJ: Transaction Publishers.
- Cheater, A. P., & Gaidzanwa, R. B. (1996). Citizenship in neo-patrilineal states: Gender and mobility in Southern Africa. *Journal of Southern African Studies*, 22(2), 189–200.
- Cruz-Malave, A., & Manalansan IV, M. F. (Eds.). (2002). *Queer globalizations: Citizenship and the afterlife of colonialism*. New York: New York University Press.
- Dean, K. (2003). *Capitalism and citizenship: The impossible partnership*. London: Routledge.
- Delgado-Moreira, J. M. (2000). *Multicultural citizenship of the European Union*. Aldershot, UK: Ashgate.
- Eder, K., & Giesen, B. (Eds.). (2001). *European citizenship between national legacies and postnational projects*. Oxford, UK: Oxford University Press.
- Gosewinkel, D. (2001). Citizenship, historical development of. In N. J. Smelser & P. B. Baltes, (Eds.), *International encyclopedia of the social & behavioral sciences* (Vol. 3, pp. 1852–1857). Amsterdam: Elsevier.

Disobedience is the true foundation of liberty. The obedient must be slaves. • HENRY DAVID THOREAU (1817–1862)

- Harris, P. (2002). The origins of modern citizenship in China. *Asia Pacific Viewpoint*, 43(2), 181–203.
- Heater, D. (2002). *World citizenship: Cosmopolitan thinking and its opponents*. London: Continuum.
- Lister, R. (2003). *Citizenship: Feminist perspectives*. New York: New York University Press.
- Kymlicka, W. (1995). *Multicultural citizenship: A liberal theory of minority rights*. Oxford, UK: Clarendon Press.
- Manville, P. B. (1990). *The origins of citizenship in ancient Athens*. Princeton, NJ: Princeton University Press.
- Marshall, T. H. (1950). *Citizenship and social class, and other essays*. Cambridge, UK: Cambridge University Press.
- Riesenberg, P. (1992). *Citizenship in the Western tradition: Plato to Rousseau*. Chapel Hill: University of North Carolina Press.
- Sahlins, P. (1994). Fictions of a Catholic France: The naturalization of foreigners, 1685–1787. *Representations*, 47, 85–110.
- Shklar, J. N. (1991). *American citizenship: The quest for inclusion*. Cambridge, MA: Harvard University Press.
- Smith, R. M. (1997). *Civic ideals: Conflicting visions of citizenship in U. S. history*. New Haven, CT: Yale University Press.

Civil Disobedience

Civil disobedience refers to a deliberate offense against authority committed openly to protest an unjust, arbitrary, cruel, pointless, or immoral law or policy of the government. It rests on the assumption that there is a “higher duty” or “higher cause” than civil authority. Civil disobedience, however, does not refer to just any kind of deliberate violation of law or government policy. Street crimes such as robbery and burglary are committed from motives such as personal gain and malice. The civil disobedient, on the other hand, is not interested in private or personal gain; rather, the purpose of civil disobedience is to protest an injustice or a wrong.

Defining Elements

The philosopher John Rawls formally defines civil disobedience as “a public, nonviolent, conscientious yet political act contrary to law usually done with the aim of bringing about a change in the law or policies of the government” (1971, 368). The important defining elements

of civil disobedience in this definition are *public*, *nonviolent*, *deliberate unlawfulness*, and *conscientious*.

A PUBLIC ACT

Civil disobedience refers to action that is of a *public* political nature. Acts of disobedience to family and school do not qualify as acts of civil disobedience. Rather, in engaging in openly announced defiance of particular laws or customs, activists are interested in demonstrating that they are withholding allegiance from the state until its alleged abuses are corrected. In addition, civil disobedience is often engaged in with prior notice as well as openly, since the protestors want as much publicity and attention as possible so as to draw attention to the injustice or wrong that is the subject of the protestors’ acts.

A NONVIOLENT ACT

Civil disobedience contrasts with acts of “warfare against the state” such as assassination, sabotage, terrorism, riot, insurrection, and revolution. Civil disobedients engage in a kind of resistance within the accepted political structure, a violation of the law without loss of respect for law and the other basic political institutions. Civil disobedients want their acts to be *nonviolent* so that they can convince the majority of their fellow citizens that the acts are indeed conscientious and sincere and that the acts are intended to address what they perceive as an injustice or wrong.

DELIBERATE UNLAWFULNESS

The civil disobedient can use one of two types of *deliberate unlawfulness* to protest an injustice or wrong. Direct civil disobedience is a type of deliberate unlawfulness that violates the very law that is the target of the protest. White people sitting in the black section of segregated buses in the 1950s is a good example of direct civil disobedience. More characteristically, the civil disobedient uses indirect acts of civil disobedience; that is, the act of civil disobedience violates some other law whose reasonableness is not in question. For example, one does not protest capital punishment for murder by

Gandhi and Civil Disobedience

Mohandas Gandhi, the person most responsible for the founding of modern India, is also one of the twentieth century's leading advocates of the use civil disobedience to bring about political change. The extract below describes his first civil disobedience campaign in South Africa from 1906 to 1914, which helped reduce discrimination and served as a model for his subsequent efforts in India.

The first mass *Satyagraha* [civil disobedience movement] and the most important, in historical perspective was launched by Gandhiji [Mohandas Gandhi] in South Africa in 1906, to fight the organized discrimination of the South African Whites against Indians who had settled there. Refusal to register, to give finger-prints and to receive permits which Gandhiji claimed would stigmatize the Indian community in South Africa as criminal was followed by wholesale arrests. In January, 1908 General Smuts promised to repeal the Ordinance and validate registration if the Indians would register voluntarily. An agreement was reached, and Gandhiji and others were released from jail. But when General Smuts did not carry out his

agreement, when the ordinance was not repealed, and when new legislation was introduced barring all further Indian immigration, the resumption of the struggle became inevitable.

On September 16, 1908 two thousand registration certificates were burned in Johannesburg on a public bonfire. The fight was on. Fines, imprisonments, floggings and firing were followed in 1913 by a High Court Judgment invalidating all Indian marriages as not in accordance with the local law. The agitation finally culminated in the classic invasion of the Transvaal on the morning of the November 6, 1913. The position of the Union Government became intolerable, and by the end of July, 1914 the Indian Relief Bill was passed repealing the three pound poll tax, validating Hindu and Muslim accepting the domicile certificate as conclusive evidence of citizenship. An eight-year struggle, unique in the history of world, ended with justice. It provided the experience and techniques for Gandhiji's subsequent campaigns in India.

Source: R. R. Satyagraha Diwakar. (1948). *The Power of Truth*. Hinsdale, IL: Henry Regnery Co., 71–72.

committing murder. Rather, one may protest such perceived wrongs by the disruption of traffic into a correctional facility where an execution is scheduled.

A CONSCIENTIOUS ACT

This element excludes motives of private or personal gain or malicious emotion as the primary reason for the action. For example, Mohandas Gandhi subverted colonial rule in South Africa and India with acts of passive disobedience. By so doing, civil disobedients suffer inconvenience, expense, threats, real danger, and eventually punishment. Their willingness to suffer these consequences helps to demonstrate that the purpose of the acts is to protest an injustice or a wrong.

Political Authority and Civil Disobedience

Judeo-Christian traditions and political philosophy teach that there is a principle of obligation higher than that of

human authorities of the political communities, and that in a conflict between the higher and the lower, the higher takes precedence. Three classic statements on civil disobedience can illustrate this relationship between political authority and civil disobedience.

HENRY DAVID THOREAU (1817–1862)

Henry David Thoreau's essay "Civil Disobedience" is perhaps the best-known American statement on the right of the solitary individual acting alone against a government that had allegedly abused its authority. Its immediate historical context was America's war with Mexico. In protest of that war, Thoreau refused to pay his taxes, a gesture that led to his spending a night in jail. In "Civil Disobedience," Thoreau argues that it was individuals and not the government that created the conditions for liberty. Moreover, societal reform does not occur through politics. The regeneration of society, Thoreau insisted, must begin with self-regeneration not political participation.

Dr. Martin Luther King, Jr. on Civil Disobedience

Dr. Martin Luther King, Jr. (1929–1968) was one of the most visible U.S. advocates of nonviolence and direct action as methods of social change. In the spring of 1963, King led mass demonstrations in Birmingham, Alabama, where local white police officials were known for their violent opposition to integration. Clashes between unarmed black demonstrators and police armed with dogs and fire hoses generated newspaper headlines throughout the world. On 12 April 1963 King was arrested in Birmingham after violating a state court ruling prohibiting protests. He was kept in solitary confinement and was allowed minimal direct contact. Nevertheless, on 16 April, writing in the margins of a newspaper, he addressed fellow clergymen who had criticized his methods of protest. The resulting “Letter from the Birmingham Jail” provides a modern view of civil disobedience and inspired continued protests that changed the face of U.S. society. In response to the Birmingham protests, President John F. Kennedy submitted broad civil rights legislation to Congress, which led to the passage of the Civil Rights Act of 1964.

Sometimes a law is just on its face and unjust in its application. For instance, I have been arrested on a charge of parading without a permit. Now, there is nothing wrong in having an ordinance which requires a permit for a parade. But such an ordinance becomes

unjust when it is used to maintain segregation and to deny citizens the First Amendment privilege of peaceful assembly and protest.

I hope you are able to face the distinction I am trying to point out. In no sense do I advocate evading or defying the law, as would the rabid segregationist. That would lead to anarchy. One who breaks an unjust law must do so openly, lovingly, and with a willingness to accept the penalty. I submit that an individual who breaks a law that conscience tells him is unjust and who willingly accepts the penalty of imprisonment in order to arouse the conscience of the community over its injustice, is in reality expressing the highest respect for law.

Of course, there is nothing new about this kind of civil disobedience. It was evidenced sublimely in the refusal of Shadrach, Meshach and Abednego to obey the laws of Nebuchadnezzar, on the ground that a higher moral law was at stake. It was practiced superbly by the early Christians, who were willing to face hungry lions and the excruciating pain of chopping blocks rather than submit to certain unjust laws of the Roman Empire. To a degree, academic freedom is a reality today because Socrates practiced civil disobedience. In our own nation, the Boston Tea Party represented a massive act of civil disobedience.

Source: King, M. L. K. (April 1963). Retrieved from <http://almaz.com/nobel/peace/MLK-jail.html>

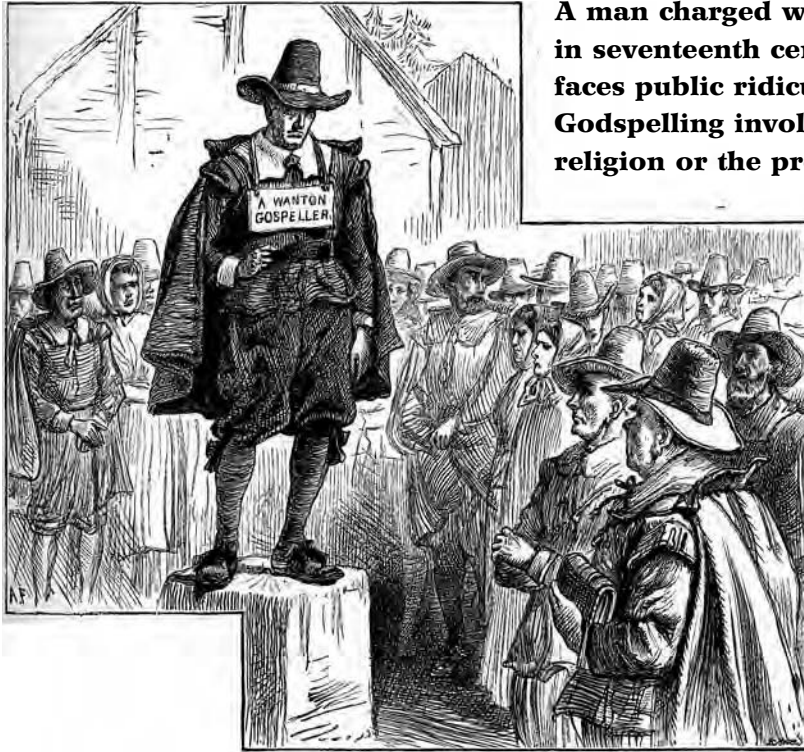
MOHANDAS GANDHI (1869–1948)

Mohandas Gandhi was a Hindu religious leader and social reformer in India who advocated the use of non-cooperation and passive resistance to achieve social and political reform. He believed that it was not sufficient to rely on persuasion or appeal to authorities to voluntarily change their unjust ways. The condition that justifies civil disobedience is the fundamental violation of human rights. However, Gandhi thought that individuals should resort to civil disobedience only after careful consideration and only those who are qualified should practice it. To be qualified, a person must already have acquired the habit of willing obedience to laws; those who have not

learned to obey laws for the right reason do not have the right to disobey the law.

MARTIN LUTHER KING, JR. (1929–1968)

One of the best-known statements on civil disobedience is the “Letter from the Birmingham Jail,” written by Martin Luther King, Jr. King wrote this letter following his arrest for refusing to halt a large civil disobedience campaign. King called upon citizens to become more involved in politics in order to secure the voting rights that had been denied to black citizens. He believed that civil disobedience presupposes recognizing political authority. King also conceived of civil disobedience as a



A man charged with being a Wanton Godspeller in seventeenth century Puritan New England faces public ridicule. The crime of Wanton Godspelling involved contempt for the Puritan religion or the preacher.

crisis-heightening tactic that would prod government into a dialogue that would lead to a solution.

Contemporary Issues

The historical tradition of civil disobedience lies in religious conscience. Acts of civil disobedience arose because of the individual's need to remain true to the dictates of "higher law." Although the tradition of civil disobedience motivated by religious conscience has not disappeared, it is no longer the primary source for its manifestation. The modern discussion of civil disobedience often occurs against a background of acknowledged just constitutions, democratic parliaments, and valid laws. The citizen, in engaging in a disobedient act, makes claims that are based on the nature of his membership in a society.

Patricia E. Erickson

See also Gandhi, Mohandas; King, Martin Luther, Jr.

Further Reading

- Anderson, C. (Ed.). (1973). *Thoreau's vision: The major essays*. Englewood Cliffs, NJ: Prentice-Hall.
- Bass, S. J. (2001). *Blessed are the peacemakers: Martin Luther King Jr., eight white religious leaders, and the "Letter from the Birmingham jail."* Baton Rouge: Louisiana State University Press.

Bleiker, R. (2000). *Popular dissent, human agency, and global politics*. Cambridge, UK: Cambridge University Press.

Cohen, C. (1971). *Civil disobedience: Conscience, tactics, and the law*. New York: Columbia University Press.

Crawford, C. (Ed.). (1973). *Civil disobedience: A casebook*. New York: Thomas Y. Crowell.

Feinberg, J. (1992). *Freedom and fulfillment: Philosophical essays*. Princeton, NJ: Princeton University Press.

Fischer, L. (1983). *The essential Gandhi: His life, work, and ideas: An anthology*. New York: Vintage Books.

Gans, C. (1992). *Philosophical anarchism and political disobedience*. Cambridge, UK: Cambridge University Press.

Goldwin, R. (Ed.). (1970). *On civil disobedience: American essays old and new*. Chicago: Rand McNally.

Haskar, V. (1986). *Civil disobedience, threats, and offers: Gandhi and Rawls*. Delhi: Oxford University Press.

Luedtke, L. (Ed.). (1992). *Making America: The society and culture of the United States*. Chapel Hill: University of North Carolina Press.

Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.

Smith, M., & Deutsch, K. (Eds.). (1972). *Political obligation and civil disobedience: Readings*. New York: Free Press.

Soley, L. (1999). *Free radio: Electronic civil disobedience*. Boulder, CO: Westview Press.

Thomas, O. (Ed.). (1966). *Walden and civil disobedience: Henry David Thoreau*. New York: Norton.

Tolstoy, L. (1987). *Writings on civil disobedience and nonviolence*. Santa Cruz, CA: New Society.

Villa-Vicencio, C. (1990). *Civil disobedience and beyond: Law, resistance, and religion in South Africa*. Grand Rapids, MI: Eerdmans.

Weber, D. R. (1978). *Civil disobedience in America: A documentary history*. Ithaca, NY: Cornell University Press.

Zashin, E. (1972). *Civil disobedience and democracy*. New York: Free Press.

Civil Law

What began as Roman law, *ius civile* ("citizens' law"), became an imperial, continental, and then a global organizing principle. Roman law started as a set of binding rules that aimed to assure harmony and facilitate commerce by confronting challenges, accommodating change, creating institutions, embracing legal concepts, and enshrining oral customs in a written format. Civil law did not usually apply to slaves, who did not

With customes wee live well, but Lawes undoe us. • GEORGE HERBERT (1593–1633)

often enjoy the proper status. The goal was to fully regulate the lives and relations of citizens.

Civil law had diverse, incremental sources. Composed of statutes, basic forms of procedure, decisions by judges, imperial edicts, senate legislation, opinions of jurists, and the assimilation of some local customs, civil law helped consolidate the management of a heterogeneous empire. The development of uniform laws across its vast territory throughout Europe, the Middle East, and North Africa was one of the most notable accomplishments of the Roman empire. By modern times civil law applied to most of the world, with the exception of Britain and its domains.

Ancient Rome

In 450 BCE, Roman leaders (consuls) proclaimed the Twelve Tables that organized public prosecution and punishment of crimes while instituting an adjudication of civil disputes. Common people (plebeians) were to be protected from the predominance of the privileged class (patricians). Male heads of families (patriarchs) wielded decisive power over their families.

Beginning in 366 BCE, praetors (magistrates from the social elite who administered justice) clarified philosophical and practical conflicts. They also proclaimed the principles of justice by which they would interpret the letter of the law. The spirit of the law was typically conservative, aspiring to protect lives, property, and the reputations of citizens. Correcting wrongs and reversing injustice were additional guidelines. Growing relations with foreigners who lived in Roman jurisdiction, or close to it, necessitated the formation of the *ius gentium* (“peoples’ law”). Its application did not discriminate between people on the basis of their citizenship. This concrete framework, coupled with *ius naturale* (“natural law”), a more philosophical set of principles, facilitated a more universal conception of laws.

Gaius (flourished 130–180 CE) authored the Institutes (“foundations”) around 130 CE. This treatise analyzed Roman law and serves as a major source for civil law. The Institutes described the different status persons possess; belongings, and how ownership is acquired, including

wills; interstate succession (what to do when a person dies without leaving a will) and obligations; and various forms of actions (how to properly conduct legal issues).

Justinian’s Contribution

The roots of civil law as conveyed to subsequent generations are derived primarily from Roman law as preserved and formulated by legal experts commissioned by the Byzantine emperor Justinian I (527–565 CE). He wanted to provide a systematic imperial law amid confusion after centuries of contested decisions. A further reason was to highlight, in Latin, the legitimacy and piety of Roman traditions as a proper foundation for Christian communities, in the process positioning himself as an enlightened, reform-minded leader, and thus consolidating his own political authority.

The result was the *Codex Justinianus* (Justinian Code), proclaimed in 529 CE. Justinian then commissioned sixteen lawyers to order and codify the legal opinions of the Roman *jurisconsulti* (“legal experts”). They issued the *Digest* of Roman jurisprudence (much of which transmitted, verbatim, Gaius’s Institutes) in 533 CE. In the same year, Justinian’s team published a handbook of civil law, which was to serve as a textbook for law students. Through its name, Institutes, they clearly tried to build upon, and replicate, the reputation of Gaius’s work four hundred years earlier.

An authoritative version of the *Codex Justinianus*, updated through the labor mentioned above, was published in 534 CE. Justinian forbade any commentary on the Digest, and possibly on the other legal instruments as well, making this *corpus juris civilis* (“body of civil law”) the normative standard for over a millennium. Finally, although the project was completed only after his death, Justinian inspired the composition of the Novels, new laws issued—primarily in Greek, symbolizing the political transfer of power to Byzantium—after the Corpus.

Overall, these compilations reflect quite accurately contemporary Roman laws. In the legal heritage that was his legacy, Justinian exuded confidence in his own

The Napoleonic Code

Napoleon's most lasting effect on France and much of the world was the set of civil laws he instituted that still bears his name.

Prior to the French Revolution of 1789, French law was broadly divided into two systems, with some exceptions. The south of France adhered to Roman written law, while customary law prevailed in the north. Napoleon saw a generalized code of laws—that is, a system of laws that was *codified* (written down) and strictly adhered to, as opposed to “common law” that evolves based on the interpretation of courts—not only as a legal necessity, but also as a means of consolidating power and abolishing all legal vestiges of feudalism. Moreover, Napoleon believed that it was important for every citizen to understand the principles and implications of his conduct.

The original *Napoleonic Code*, or *Code Napoléon*, entered into force in 1804 and remains today the basis for French civil law. The Code was the first legal

code to be established in a country with a civil legal system based on Roman law, and followed Justinian's *Corpus Juris Civilis*, which divided civil law into three main concentrations: (1) personal status; (2) property; and (3) the acquisition of property. Separate codes addressed issues related to criminal law and commercial law.

The Code was so comprehensive that it became the model for legal systems around the world. With the exception of the United Kingdom, Russia and the Scandinavian countries, the Napoleonic Code is still the basis for the civil law systems of modern Europe. In the United States, for example, Louisiana, once a French territory before the Louisiana Purchase of 1803, still adheres to civil law based on Napoleonic Code despite the fact that every other member state of the United States follows a system of common law that is based on the British legal system.

Benjamin S. Kerschberg

understanding of God's guidance to the type of Christianity he espoused, but showed little tolerance toward any other versions, much less to Jews or pagans. Perhaps thanks to the influence of his controversial wife, Theodora (c. 497–548 CE), Justinian improved the status of women. He was also particularly attentive to equitable administration of the provinces.

The Middle Ages

Justinian's volumes were coupled with incremental jurisprudence composed of judicial decisions, the opinions of legal scholars, wide public obedience toward emerging norms in criminal, commercial, and maritime law, and evidence of continuous custom. These were complemented by canon law. Combined, they serve as the sources of modern civil law.

After the breakdown of the world order that followed the gradual collapse of the Roman empire around 500 CE, civil law was used by the multiple successor sovereignties and political entities. It thus became the organizing legal principle of continental Europe. Charle-

magne (Charles the Great, reigned 768–814 CE) relied on Roman traditions to derive legitimacy and for practical reasons. When, blessed by Pope Leo III (reigned 795–816 CE), Charlemagne established the Holy Roman Empire on Christmas Day 800 CE, the principles of its civil law governed matters of private law, together with local Frankish customs and notions of Christian justice.

The Modern Era

Starting from the sixteenth century, the civil law system expanded to the colonial territories of European states—including France, Belgium, Portugal, and Spain—in Latin America, Asia, and Africa. Other countries affected by contact with European powers, such as Japan and China, also adopted civil law. Socialist countries, beginning with Russia, adopted it as the legal system best known by the founding father of their ideology, the German-born Karl Marx (1818–1883). Civil law has also served as the foundation for the principles of international law. The Roman phrase *ius gentium* (commonly translated in this

Good laws are the offspring of bad actions. • CHARLES MACKLIN (c. 1697–1797)

context as “the law of nations”) was the initial designation for the legal system that addressed more than one center of sovereignty.

The most important example of a modern *corpus juris civilis* is the 1804 Napoleonic Code. It became a role model for others, thanks to its relatively inclusive and progressive spirit, especially the emancipation of religious minorities such as the Jews. Napoleon Bonaparte (1769–1821) consolidated French influence, and his own rule as an emperor, over a considerable segment of the world amid his wars with Britain and its allies. His code has three parts (governing personal status, property, and the acquisition of property), roughly corresponding to the structure of the *Codex Justinianus*.

Relationship with Common Law

Civil law is distinguishable from the British common law tradition, established after William the Conqueror successfully invaded England in 1066. Historically, there were substantive differences. Whereas common law relied on unwritten custom, then on long renderings of judicial opinions primarily affirming or rejecting precedents, civil law is based on detailed, explicit clauses in binding codes or other legislative acts, and on short judgments interpreting and applying the norms exemplified by such binding instruments. In addition, as its name denotes, common law only applied, at least initially, to the lower classes in the empire, in England and beyond, but not to the monarchy and the titled aristocracy. The jurisdiction of civil law, in contrast, was meant to be more comprehensive, incorporating all citizens. In reality, however, many of these distinctions were more semantic than substantive.

Some places, such as the Canadian provinces of Quebec and New Brunswick, and Louisiana in the United States, because of their considerable French heritage, possess strong civil law traditions (in 1774 the British Parliament passed the Quebec Act allowing this territory to retain the French civil code; Louisiana adopted its own code in 1821). Because they are part of a federal framework, the ultimate authority over such jurisdictions is

vested in their supreme courts, where the majority inevitably comes from areas governed by common law; Canadian custom allots Quebec three of nine seats in the Supreme Court.

The Future

Since World War II, and the speedy availability of case law and scholarly research to most interested jurists and institutions, common law and civil law converge much more than they diverge, linguistic and cultural distinctions notwithstanding. As the harmonization of laws necessitated by globalization continues, civil law may come to be remembered more as a relic of the past than a unique organizing principle, even in continental Europe, where its legacy cannot be erased. The pioneering importance of civil law will serve as guidance as international law expands into dimensions hardly known or practiced until the twentieth century, such as the promotion and protection of human rights and the environment.

Itai Nartzizenfield Sneh

Further Reading

- Aubert, J. J., & Sirks, B. (Eds.). (2002). *Speculum Juris: Roman law as a reflection of social and economic life in antiquity*. Ann Arbor: University of Michigan Press.
- Gall, G. L. (1990). *The Canadian legal system*. Toronto, Canada: Carswell.
- Glenn, P. H. (2000). *Legal traditions of the world: Sustainable diversity in law*. Oxford, UK: Oxford University Press.
- Harris, S. F. (1994). *The elements of Roman law summarized: A concise digest of the matter contained in the institutes of Gaius and Justinian*. Holmes Beach, FL: Wm. W. Gaunt.
- Johnston, D. (1999). *Roman law in context*. Cambridge, UK: Cambridge University Press.
- Merryman, J. H. (1969). *The civil law tradition: An introduction to the legal systems of Western Europe and Latin America*. Stanford, CA: Stanford University Press.
- Palmer, V. V. (Ed.). (1999). *Louisiana: Microcosm of a mixed jurisdiction*. Durham, NC: Carolina Academic Press.
- Pittman, P. B. (2001). *The Chinese legal system: Globalization and local legal culture*. London: Routledge.
- Stein, P. (1999). *Roman law in European history*. Cambridge, UK: Cambridge University Press.
- Watson, A. (1998). *Ancient law and modern understanding: At the edges*. Athens: University of Georgia Press.

Civilization, Barbarism, Savagery

C*ivilization, barbarism, and savagery* are three powerful notions. At least since the eighteenth century, they have played an important role in the human sciences, even as the vocabulary for these notions has shifted over time. During this same span of time, these notions have also played a central role in numerous ideologies of empire, exploitation, and genocide. Ultimately scholars of world history and other social theorists must ask whether intellectual uses of *civilization, barbarism, and savagery* can ever be free of these sociopolitical uses and consequences. Or is it the case, as the French anthropologist Claude Lévi-Strauss (b. 1908) has suggested, that to affirm the distinction between civilization, on the one hand, and barbarism and savagery, on the other, is to take a fateful step into “barbarism” and “savagery,” in the sense of behaving toward Others in the fashion imagined to be characteristic of barbarians and savages?

Before Anthropology

The term *civilization*, as the embracive term for humanity’s cumulative achievements through time, did not appear before the second half of the eighteenth century, when it emerged in both French and Scottish intellectual traditions in the context of rising confidence in the progressive character of human history. Yet, for centuries before that, words derived from the Latin *civilitas* were used, often in association with *barbarism* and/or *savagery* (and their grammatical variants), to differentiate a speaker’s own properly organized society from the inferior life-ways of Others. As this formulation indicates, in these primary, or uncontested, uses of these terms, one finds a consistent conflation of the distinction between Self and Other with the distinction between superior and inferior peoples.

Though the terms *barbarism* and *savagery* circulated

The barbarian is first and foremost the man who believes in barbarism . . . • CLAUDE LEVI-STRAUSS (b. 1908)

as contrasts for *being civilized*, the two terms of inferiority had roots in distinct axes of comparison. *Barbarian* entered Greek as a term for peoples who, it was held, lacked intelligible speech. *Savagery*, on the other hand, emerged from the Latin *sylva* and referred specifically to those who lived in the woods, with human life in this habitat being taken as the antithesis of the “civil” society of cities. Yet, whether they are true or false, etymologies matter only when they are “remembered,” and in the centuries before Victorian anthropology codified a distinction between them, *savagery* and *barbarism* were often used interchangeably, without their different “roots” being called upon. Nonetheless, it seems fair to say that the etymological and narrower meanings of *barbarian* and *savage* shaped the overall pattern of their referential use prior to the mid-nineteenth century and thereby conditioned the distinction formalized in Victorian social anthropology (*savagery* as the earliest stage of human development, followed by *barbarism*). During the centuries of “exploration” before the late nineteenth century, peoples inhabiting dense forests and jungles were far more likely to be encountered overseas than on the Eurasian margins of Christendom. Consistent with this, the term *savage* came to be linked more tightly than the term *barbarian* to the peoples of the lands of “exploration” and “discovery,” notably Africa and North America. In this way it seems, *savages* became the more extreme contrast with *civilized* society. Finally, we should note—given that so few white people in the United States are aware of the fact—that at many moments during the history of the Americas, the term *savage* has had an expressive force and significance comparable to that of *nigger*.

We should also record, however, that nearly from the outset of early modern “discovery” and “exploration,” there were potent protests against the use of *barbarians* and *savages* as terms for Others. In 1550, for instance, Father Bartolomé de Las Casas (1474–1566) attacked the jurist Juan Ginés de Sepúlveda’s claim that Indians were “barbarians,” although, significantly, Las Casas’s famous *Defense* was based on a systematic myopia in regard to many of the ways in which Aztec society was

Images such as this one of indigenous peoples encountered by European explorers had an enormous impact on the population back home. This drawing is titled *Figure of a Tattooed Native of the Marquesas* and is from the journal of Captain David Porter of the *Essex*, 1812–1814.

unlike that of “civilized” Christians. Moreover, consistent with his largely assimilationist vision, Las Casas conceded that Indians were “barbarians” on the basis of religion, because of their lack of Christianity. Some three decades later, however, the French essayist Michel de Montaigne (1533–1592) offered a more radical critique of the conceptual distinction between *civilized* and *noncivilized*. In his essay, “On Cannibals” (1580), he wrote: “I find that there is nothing barbarous and savage in this nation, by anything that I can gather, excepting, that every one gives the title of barbarism to everything that is not in use in his own country.” Montaigne’s essay shows us that the struggle against Eurocentric ethnocentrism is not an invention of our time but is instead longstanding—preceding even the formation of what we today know as “Europe.”

Victorian Anthropology

It is during the final decades of the nineteenth century, in the classic works of Victorian social evolutionary anthropology (e.g., Morgan, 1877), that we find the most thorough attempts to render *civilization*, *barbarism*, and *savagery* as stabilized terms of a formal and objective scientific discourse. This instance of scientizing both presaged and overlapped the production of “scientific racism.” In Victorian anthropology, *savagery* and *barbarism* were differentiated as sequential stages of social evolution. This schema reflected a much broader and quite sharp increase in the use of time as an idiom for conceptualizing human social variation, which arose in the wake of the “revolution in human time,” itself located



at the end of the 1850s and the beginning of the 1860s. In the new understanding of time, the beginning of human existence was located vastly deeper in the past than in the biblical chronology of some six thousand years. Concomitantly, recorded time suddenly appeared to be no more than a miniscule segment of the entirety of human existence. In this new intellectual context, Victorian anthropology identified living “savages” and “barbarians” with the newly recognized expanse of prehistory—peoples lacking writing with the time before writing—in support of elaborate models of generalized stages of human social evolution that, scholars held, preceded the advent of civilization.

Within anthropology, this pairing of living Others and prehistory, along with the knowledge produced in

A Ship's Captain on the Ainu of Japan

In A Voyage of Discovery to the North Pacific Ocean, William R. Broughton, captain of the HMS Providence, presented his impression of the Ainu in the late eighteenth century:

This people appear to have intelligence. Their beards are long, black, and strong. They have brown skin and their heads are shaved with the exception of a tusk of hair the size of two fingers, which rests at the front of the head. They put their hands together below their heads as a greeting. They are dressed in bear skins and armed with bow and arrow. . . . The people seem to have no religion. They eat like barbarians, without any sort of ceremony. . . . They seem to have no government, no writing or books, and no one seems able to read or write.

Source: Broughton, W. R. (1804). *A Voyage of Discovery to the North Pacific Ocean* 1804, 89ff.

this way, came under scrutiny from Franz Boas (1858–1942) and his students. Social change, the Boasians argued, did not proceed along a singular or universal path, as Victorian social evolutionary theory required. Moreover, other societies in the contemporary world were not the equivalents of earlier stages of European societies but were instead the present-day outcomes of quite different trajectories through time, reflecting other cultural values. The diversity of human societies in the world could not be mapped on to a singular path of human social evolution, but instead, exhibited a “great arc” of human possibilities (Benedict 1934, 24).

Language provided a crucial test of these issues for the Boasians. Starting from painstaking analyses of myriad non-European languages, the Boasians concluded that the existing languages of the world were equally “evolved,” as judged by their capacities for effective communication and conceptual abstraction. Linguistic differences were real—and took forms far more fantastic than could have been imagined without ethnographic research—but different languages could not, with any validity or objectivity, be sequenced. In sum: the view that

Others lack intelligible speech, or are otherwise barbarians, is an ethnocentric illusion—exactly as Montaigne had argued 350 years earlier.

The Boasian critiques turned cultural-social anthropology sharply against social evolutionary models. In addition, through undergraduate teaching and the public circulation of some of their work, the Boasians fostered a nontrivial degree of self-consciousness among a wider public about the ethnocentrism present when others are deemed *savages* or *barbarians*. Yet, it is also important to recognize the incompleteness of the Boasian displacement of social evolutionary thought. One important index of this incompleteness is the vocabulary that they endorsed (by example, at least) as a substitute for *savages* and *barbarians*—notably the term *primitives*. *Primitives* carries a social evolutionary vision of the human career in time: it points unabashedly to a much earlier past, and it associates both simplicity and a lack of development with temporal earliness. In this way it is a sanitization, more than an exorcism, of the Victorian anthropological meanings of *savagery* and *barbarism*. Moreover, what we too often overlook in evaluating this sort of shift in labeling is that if we use a new term to refer to the same set of elements as a previous term or terms—as when people use *primitives* to refer to peoples previously known as *savages* and/or *barbarians*—we leave intact the underlying classificatory distinction, in this case the distinction between *civilized* and *precivilized*. In other words, when we reproduce patterns of reference, we also reproduce categories of language and thought.

Disciplinary History

Although social evolutionary thought was to a significant degree displaced within anthropology by the Boasian critiques, it is also the case that such thought was transposed into other sites, within and outside of the academy. Disciplinary history is a key example. Although the new chronology of the 1860s made historical time but a brief portion of human time and thereby established a novel meaning of *history*, historians of the late nineteenth century steadfastly disregarded the new understanding of human time. In this way, history as a scholarly activity avoided affiliating itself

Allen's Law of Civilization: It is better for civilization to be going down the drain than to be coming up it. • PAUL DICKSON (B. 1939)

too closely, or at least too quickly, with the rejection of biblical authority represented by both anthropological models of *civilization*, *barbarism*, and *savagery*, on the one hand, and Darwinian theories of speciation, on the other. This situation changed during the first decades of the twentieth century with the work of James Harvey Robinson (1863–1936), the primary exponent of the “new history.” The long chronology was a central and abiding concern in Robinson’s work. For Robinson, it provided a vantage and scale that dwarfed the details of history on a smaller scale and thereby made visible the overall trajectory of the human career: it was the “building of civilization.”

That Robinson’s embrace of the long chronology brought social evolutionary thought into his “new history” is particularly evident in his entry “Civilization” in the 1929 edition of *The Encyclopedia Britannica*. There Robinson bypassed the work of Franz Boas, who had been his colleague throughout Robinson’s twenty-three-year career at Columbia University, and endorsed the “ingenious analogies” drawn by “anthropologists” between “Tasmanians, Australians, Eskimos, etc.” and “the Neanderthal race.”

Consistent with this, Robinson was a central figure in the complex process that resulted in civilization, rather than the nation-state, becoming the most prominent unit of historical analysis in undergraduate teaching in the United States during much of the twentieth century. During the 1920s and early 1930s, it was primarily Robinson’s students, along with a small number of other historians greatly influenced by him, who took the lead in introducing and institutionalizing what quickly became the standard survey of Western civilization (known as “Western Civ”). In so doing, these curricular innovators drew heavily on both Robinson’s essays and, even more directly, his graduate-level teaching at Columbia. In particular, Western Civ echoed Robinson’s “new history” in both its reliance on the long chronology and its presentation of history as the movement of the civilizational Self away from and ahead of primitive Others.

It is important to note, however, that even as Western Civ embedded social evolutionary thought in its narrative of history, it also promoted a broadly cosmopolitan

ethos and worldview. With its focus on “the West” as a civilizational area, Western Civ encouraged its addressees (U.S. undergraduates) to identify with something above and less parochial than “the nation,” in contrast to the more narrowly patriotic form of history taught in secondary education. So too, the Western Civ narrative depicted Western civilization as drawing on sources from all over the map of Europe. It thus offered a welcoming tale to the children of immigrants who, during the 1920s and 1930s, were diversifying the student bodies on U.S. college campuses, supplementing and quickly outnumbering the children of the established Protestant elite. Finally, in the Western Civ narrative, civilization was something possessed not by virtue of birth, but rather by means of the transmission of knowledge—as in formal education and schooling. Western Civ thus offered an account of history that, allegorically, rejected the notion of ascribed status and affirmed the ideal of merit-based system of achievement. In sum, although Western Civ was always intensely Eurocentric (by virtue of identifying the West as the primary site and agent of the building of civilization), in its heyday it was also “cosmopolitan” and “progressive” in these nontrivial ways.

That social evolutionary thought had been elaborated as a theoretical position in Victorian anthropology was, ironically, an important condition of possibility for its critical examination by the Boasians. The movement of social evolutionary thought into history produced much less critical examination, both in Robinson’s day and since. In part this is because even as history departments taught Western Civ at the introductory level for many decades (as many still do), most historians worked with dramatically shorter segments of time in their research and upper-level courses. In so doing they set aside, but did not explicitly examine or critique, the social evolutionary vision of Western Civ. It would be an error, however, to overlook the extent to which the geographic coverage of history departments, and many other facets of the organization of historical knowledge, are shaped by the distinction between *civilization* and *precivilization*.

An important exception to the prevailing disciplinary practice of side-stepping this complex issue can be found

Without deviation, progress is not possible. • FRANK ZAPPA (1940–1993)

in the field of African history, as evidenced by Steven Feierman's essay, "African Histories and the Dissolution of World History" (1993). A primary target of Feierman's discussion is the very notion of *civilization*. The civilization concept, says Feierman, involves "a complex of elements" that historians and other social theorists have claimed are mutually reinforcing: "political and economic hierarchy, towns, commerce and intercommunication, writing, the plough, high densities of population and historical dynamism" (Feierman 1993, 177). However, when we broaden our research to include African histories, we find numerous cases in which these "interrelations do not hold" (Feierman 1993, 177). No basis exists, then, for continuing to treat these elements as the components and indices of a distinct stage (or even form) of human sociality. As Feierman concludes: "The elements have no explanatory significance if treated as a check list" (Feierman 1993, 178).

Moreover, if we stubbornly hold on to the civilization "complex" and insist on using it to perceive African histories, we will overlook and misrecognize quite different linkages. For example, Feierman discusses how trade in the Kongo during the seventeenth century—involving, on an annual basis, ivory from as many as four thousand elephants and as much as 36 metric tons of copper—was supported not by anything recognizable as a "state," but rather by a dispersed "healing association" or "drum of affliction" (Feierman 1993, 178). The overall point then is that the civilization concept serves us poorly when examining African histories, and this is sufficient to conclude that it lacks universal applicability and validity.

Contemporary Political Uses of Civilization

Research in both cultural-social anthropology and African histories thus contests the coherence of the *civilization/precivilization* binary. In addition, both fields have documented the recurring use of this distinction in support of projects of astonishing brutality, often in the name of "modernization" and "progress." Nonetheless, the distinction remains a potent one, and in the contemporary moment it is used with particular verve by leading

figures in the neoconservative movement which, particularly in the United States, has gained so much power since the 1960s.

The administration of President George W. Bush, for example, has repeatedly invoked images of a struggle between "civilization" and "barbarism" to conclude that the United States must wage war, rather than peace, in response to the violence of September 11, 2001 and other terrorist acts. Critics, however, argue that such rhetorical demonizing serves to preempt a recognition of the modernness of so-called Islamic fundamentalism and of the primary factors that fuel global terrorism today, notably: (1) a widespread sense of desperation in many societies in response to the global maldistribution of political agency and the consumption of resources, (2) the global trade in weapons, including weapons of mass destruction, resulting largely from the Cold War, and (3) resentment in Islamic societies toward the U.S. government's uncritical support for Israeli state policies of oppression toward Palestinians. The Bush administration's goal of vanquishing the "barbarians" in our midst does not, critics argue, engage these root causes of terrorism.

A second context in which the neoconservative movement has invoked *civilization* in recent years is in response to the movement to expand marriage to include same-sex couples. In February 2004, for example, George W. Bush endorsed an amendment to the U.S. Constitution to limit marriage to heterosexual couples, arguing that marriage so defined is "the most fundamental institution of civilization," as demonstrated by "millennia of human experience." In response, the American Anthropological Association, drawing on its Boasian heritage, passed a "Statement on Marriage and the Family," which reported that anthropological research offers no evidentiary support for Bush's claims in this regard.

The distinction between civilization and precivilization is sufficiently established in contemporary knowledge of humanity that many, and perhaps most, world historians would question the idea of doing without it. Greater care and reform may be warranted, but not, on such a view, relinquishing the very idea of civilization. Yet for others, the intellectual and social-political record of civilizational



thinking is sufficiently grim that, at the very least, the time has come for a moratorium on the use of notions of *civilization*, *barbarism*, and *savagery*—however euphemistically expressed.

Daniel Segal

See also Anthropology; Cultural Ecology; Ethnocentrism; Race and Racism

Further Reading

- American Anthropological Association. (2004). Statement on marriage and the family. Retrieved August 6, 2004, from http://www.aaanet.org/press/ma_stunt_marriage.htm
- Benedict, R. (1934). *Patterns of culture*. Boston: Houghton Mifflin.
- Boas, F. (1889). On alternating sounds. In *The shaping of American anthropology: A Franz Boas reader* (G. Stocking, Ed.). New York, NY: Basic Books.
- Chakrabarty, D. (2000). *Provincializing Europe: Postcolonial thought and historical difference*. Princeton, NJ: Princeton University Press.
- Feierman, S. (1993). African histories and the dissolution of world history. In R. Bates, V. Y. Mudimbe, & J. F. O'Barr (Eds.), *Africa and the disciplines*. Durham, NC: Duke University Press.
- Levi-Strauss, C. (1958). *Race and history*. Paris: UNESCO.
- Mondani, M. (2004). *Good Muslim, Bad Muslim: America, the Cold War, and the roots of terror*. New York: Pantheon.
- Montaigne, M. (1958). *Complete essays* (D. M. Frame, Trans.). Stanford, CA: Stanford University Press.
- Morgan, L. H. (1877). *Ancient society: Or, researches in the line of human progress from savagery through barbarism to civilization*. Chicago: C. H. Kerr.
- Robinson, J. H. (1912). *The new history*. New York: Macmillan.
- Robinson, J. H. (1929). Civilization. In *The encyclopedia Britannica*. London: Encyclopedia Britannica.
- Ross, D. (2001). Progress: History of the concept. In *International Encyclopedia of the Social and Behavioral Sciences*. Amsterdam: Elsevier.
- Stocking, G. (1968). *Race, culture, and evolution: Essays in the history of anthropology*. New York: Free Press.
- Stocking, G. (1987). *Victorian anthropology*. New York: Free Press.
- Trautmann, T. (1987). *Lewis Henry Morgan and the invention of kinship*. Berkeley and Los Angeles: University of California Press.

Classical Civilizations

See Aztec Empire; Egypt, Ancient; China; Greece, Ancient; Harappan State and Indus Valley; Inca Empire; Mesoamerica; Mesopotamia; Persian Empire; Roman Empire

Climate Change

Many world historians explain changing earth history in terms of its changing climate. Scientists however focus more directly on the causes for long term climate change. They are: the exchange of energy by the oceans and atmosphere, fossil-fuel emissions, and solar energy. With global temperatures rising since 1860, climatologists predict that they may continue to increase by as much as 2° C during this century. Evidence of global warming appears in a melting Arctic ice cap—a reduction in volume of 3 to 4 percent each decade since the 1970s. As a result, sea levels have been rising since 1900 with the rate of change accelerating in the last half century. Contracting ice sheets and rising sea levels submerge coastal areas that affect the natural migration of some plants, animals, and microbes. Not all of the outcomes are negative, however, since melting glaciers expose more land for vegetation and habitation. During warming phases in the northern latitudes, migrating forests replace northern tundra and formerly marginal lands become suitable for cultivation and food production.

Climate fluctuations from warm, temperate, and interglacial to cold, arctic, and glacial can occur rapidly within a century and without much warning. The final collapse of the last Ice Age occurred about 9500 BCE and marked the beginning of the current global warming period. This rapid atmospheric warming, possibly the most significant climate event in the last forty thousand years, caused abrupt rises in global sea levels. Warming and glacial melt at about 7500 BCE flooded the Black Sea basin. The biblical “flood” may have been a reference to this natural catastrophe. Although many gaps exist in our knowledge about climate warming and cooling, efforts to unravel the complexities of the global climate have focused on specific events that trigger changes in the weather.

The Atlantic Circulation Energy Exchange

The world's oceans serve as a heat transportation system absorbing much of the heat from the solar energy

The ultimate measure of a man is not where he stands in moments of comfort, but where he stands at times of challenge and controversy. • MARTIN LUTHER KING JR. (1929–1968)

penetrating the atmosphere. As rising temperatures increase freshwater snowmelt, the salinity of the oceans decreases, affecting their circulation. Decreasing the volume of heavy salt water disrupts the great Atlantic Deep Water Circulation, which brings warm tropical water across the equator toward the North Pole. These warm waters become the “gulf stream” that warms the New England coast and brings moisture and warmth to the British Isles. Without it, these coastal regions would become several degrees colder, turning fertile soil into permafrost.

Since the oceans transport heat, abrupt small increases in temperature or increases in fresh glacial melt lower the density of the water, namely its capacity to sink, slowing down and in severe instances stopping the circulation. According to some climatic models, turning off or slowing down this current, often called “a huge heat pump,” has cooled down the northern temperate regions and been responsible for many of the abrupt climate oscillations during the last 100,000 years.

El Niño

For the past forty years the salt content of the North Atlantic has declined continuously. However, recent failures to simulate the relationship of these rapid climate changes to the Atlantic circulation have led scientists to search for another climatic event that may contribute to either hemispheric or global climate change. They have concluded that the tropical Pacific Ocean and its El Niño episodes in combination with the Atlantic circulation may provide an answer.

As the world’s largest ocean, the Pacific covers about 181 million square kilometers, with the widest band along the tropics, where solar energy is converted mostly into heat. Ocean currents and wind velocity serve to distribute this heat. During some years, atmospheric and sea temperatures are abnormally warm for reasons that are not completely understood. However, these reasons may include sunspot activity, the effects of the Atlantic Deep Water Circulation, and the fact that the world’s oceans now consume a larger carbon load caused by fossil-fuel emissions.

Some climatologists believe that these anomalies may trigger El Niño oceanic conditions, meaning that the flow of cold water from South America to the warm Pacific pool decreases or ceases entirely. In the absence of the easterly wind shears that drive the surface cold water to Asia, westerly winds push the warm Pacific pool toward the Americas. Hot and humid air travels with this warm pool, soaking previously arid equatorial islands and the coastal regions of the Americas from Peru to the west coast of the United States with torrential rains. With accelerating westerly winds, precipitation extends into the Western Hemisphere from the Americas and Eurasia to the Russian plains. Drought strikes India, China, Indonesia, and Africa.

The impact of El Niño on the distribution of heat and precipitation around the world is well known. What remains unknown is the relationship between Atlantic and Pacific oceanic events on the global climate. Ocean temperatures and salinity influence circulation. In fact, some North Atlantic deep water may enter the equatorial Pacific and cool the water temperature and the atmosphere as it does in the Atlantic Ocean and in this way defuse the catastrophic climatic effects of El Niño. If the cold water circulation of the Atlantic slows or stops, however, then there exists no known constraint on El Niño’s harmful effects.

EL NIÑO’S IMPACT ON WORLD HISTORY

Prior to the Spanish conquest of the Incas in 1500 CE, advanced civilizations of native farmers and fishermen spread out along the northern Peruvian coast. These Native Americans, called the Moche, built pyramids, crafted pottery, and made gold ornaments to celebrate their spiritual and material achievements. The remains of their irrigated canals and mud-brick buildings attest to their advanced civilization. The sedimentary evidence found in riverbeds, in coastal lagoons, and by examining the fossil remains in these sediments reveals that repeated episodes of El Niño disrupted Moche civilization. Floods and droughts forced the Moche to abandon established sites for newer ones. With more energy from the overheated oceans, mega-El Niños activated water and wind

circulation, raised atmospheric temperatures, and created volatile weather.

By 1100 CE the warm period was giving way to the little ice age and mega-El Niños were in decline. With less energy transfer to activate the tropical oceans, one last major El Niño reached landfall in northern Peru in 700 CE. These pre-Spanish Conquest El Niños, similar to other major climatic events in world history, caused major political and cultural dislocations in the lives of native people. Floods in coastal areas and drought east of the Andes Mountains forced populations to relocate, rebuild, and adapt to the volatile weather systems that visited South America throughout this warming period.

EL NIÑO IN RECENT HISTORY

Research into the history of the El Niño weather phenomenon stems from the discovery that the El Niños of the 1980s had worldwide effects. Because of drought conditions during that decade, peasants were forced to leave northeastern Brazil, political instability occurred in some sub-Saharan countries, and food shortages became commonplace in India, China, and Japan. El Niño weather systems prove unmistakably the connectedness of the global climate system and its specific effects on biological entities, historical developments, and local and regional weather patterns.

The El Niño events of 1982–1983 reinforce theories and knowledge about the energy exchanges of the world's cold and warm waters, especially in the Indian, Pacific, and Atlantic, by absorbing solar energy and releasing heat into the atmosphere. The destructive forces unleashed by El Niño episodes suggest that the world's oceans reach a point of energy overload and need to discharge their accumulated heat. In this way an unpredictable global climate system is brought back into delicate balance.

As we have seen, scientists have identified three basic causes of global climate change—the exchange of energy by the oceans and the atmosphere, fossil-fuel emissions, and solar energy. Much remains to be discovered about its causes and effects, however. Solar energy output has periodic and sometimes irregular patterns of intensity.

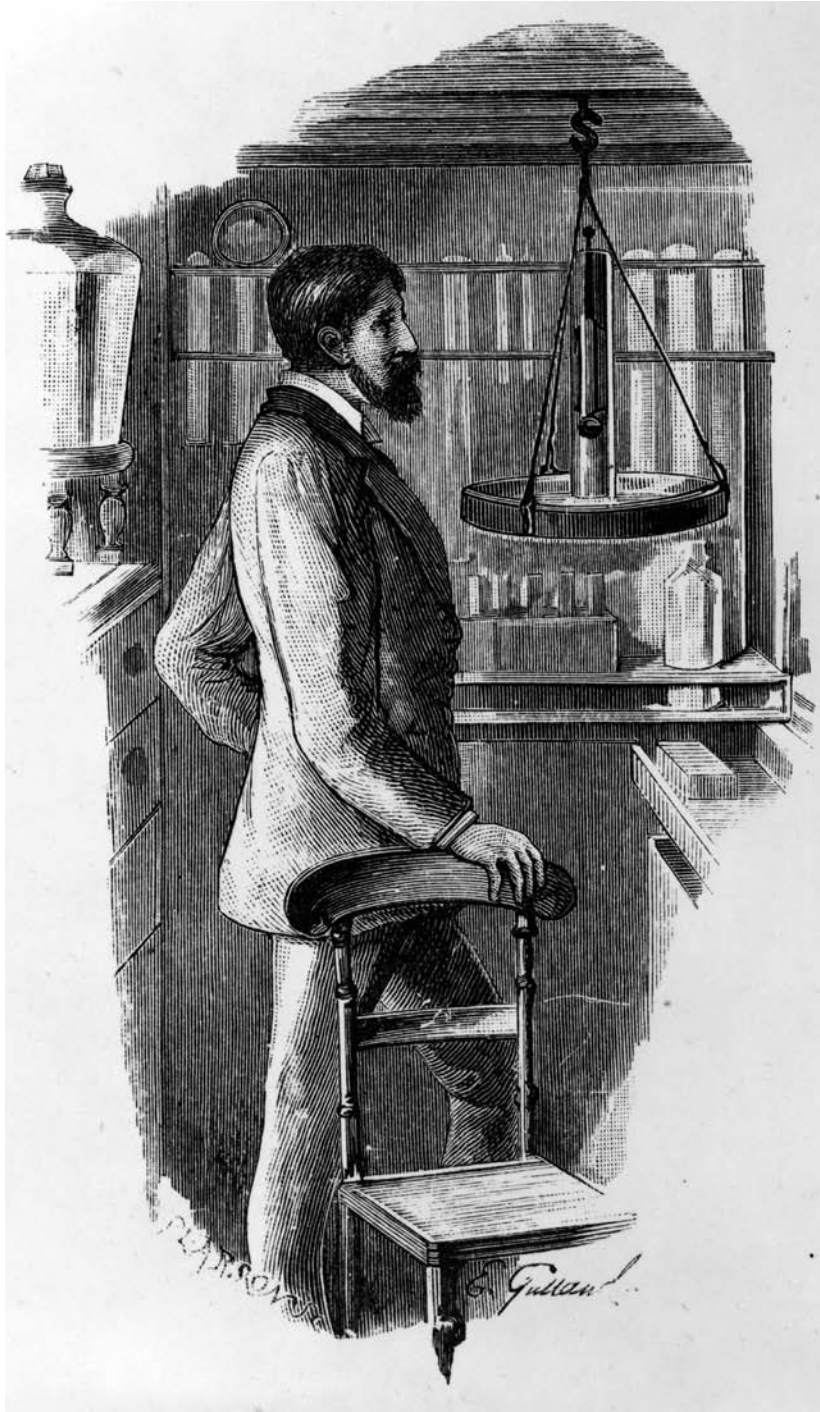
The Oceans and Rapid Climate Change

The following is taken from a report on a study, published in 2003, that strengthened evidence that the oceans and climate are linked in an intricate dance, and that rapid climate change may be related to how vigorously ocean currents transport heat from low to high latitudes.

[Scientists] report that the coldest interval of the last 20,000 years occurred when the overturning circulation collapsed following the discharge of icebergs into the North Atlantic 17,500 years ago. This regional climatic extreme began suddenly and lasted for two thousand years. Another cold snap 12,700 years ago lasting more than a thousand years and accompanied another slow-down of overturning circulation. Each of these two cold intervals was followed by a rapid acceleration of the overturning circulation and dramatically warmer climates over Northern Europe and the North Atlantic region.

The research team found that the rate of ocean circulation varied remarkably following the last ice age, with strong reductions and abrupt reinvigoration closely tied to regional climate changes. [Reporting scientist] Jerry McManus says this is the best demonstration to date of what many paleoclimatologists and ocean scientists have long suspected. “Strong overturning circulation leads to warm conditions in the North Atlantic region, and weak overturning circulation leads to cold conditions,” he said. “We’ve known for some time from changes in the chemistry of the seawater itself that something was different about the ocean’s circulation at times of rapid climate changes, and it now appears that the difference was related to changes in the rate of ocean circulation. One big question is why the circulation would collapse in the first place and possibly trigger abrupt climate change. We think it is the input of fresh water to the surface ocean at a particularly sensitive location.”

Source: Woods Hole Oceanic Institute. (April 21, 2003). http://www.whoi.edu/institutes/occi/currenttopics/abruptclimate_mcmanus_pr.html



A scientist on the H.M.S. Challenger during the years 1873–1876 compares air and surface sea temperatures in various parts of the world.

known about El Niño, it remains an area of great interest for scientists and historians because of its potential effects on the global climate and global population.

The Role of Fossil-Fuel Emissions

Rising global temperatures translate into increased atmospheric water vapor, a greenhouse gas, as more of the world's warming ocean water evaporates, causing more precipitation. Releasing the energy sequestered for millions of years in fossilized plants and animals by burning coal, oil, and gas elevates concentrations of another greenhouse gas, carbon dioxide (CO₂), in the atmosphere. During periods of industrialization, the burning of fossil fuels and deforestation have increased the carbon dioxide load in the atmosphere by about 25 percent. Within the last hundred years, 40–50 percent of the world's pioneer forests and uninhabited lands that change CO₂ into oxygen by the process known as photosynthesis have been transformed into agricultural production and commercial and residential construction. Also caused by the burning of fossil fuels, other fast-growing greenhouse gases such as methane (CH₄) and chlorofluorocarbons (CFCs) with greater heat-absorbing qualities than CO₂ have affected atmospheric temperatures. From 1850 to 2000

Periods of high intensity occur during eleven-year cycles and those of low intensity take place about every three and one-half years. Although the similarities in the pattern are not conclusive, some scientists argue that El Niño returns at intervals of high intensity. Finally, no substantial body of evidence points to a relationship between the warming of the Pacific waters in recent decades, a trigger for El Niño, and atmospheric pollution. Since much is un-

CE, the human contribution to the increased concentration of CO₂ by burning fossil fuels, deforestation, and agriculture was about 1.7 trillion tons. About 40 percent of this CO₂ remains in the atmosphere and it is increasing at a rate of about 0.5 percent per year.

Global warming occurs more rapidly in frigid regions rather than in the temperate and tropical areas because arctic air lacks water vapor. This characteristic makes CO₂

a more important greenhouse gas where the air is cold and dry. In warmer, humid air, water vapor is a more important as a transporter of heat than CO₂. Because warming is unevenly distributed across the planet, what exactly CO₂ contributes to global warming remains debatable.

Some scientists argue that the emission of greenhouse gases in the twenty-first century will delay the predicted onset of colder conditions. During the current warming phase one can expect the physical properties of CO₂ to contribute to more rainfall, higher atmospheric and oceanic temperatures, more clouds, and higher wind velocity. The biological effects of CO₂ are noteworthy, contributing to longer growing seasons in the temperate and tropical climates. Arid and semiarid lands mainly unavailable for agriculture may receive sufficient moisture to increase food stocks for a global population whose growth rate will stabilize at between 9 and 12 billion people by 2050 CE. The specific impacts of human population growth on the global climate system remain unknown, however.

The Role of Solar Energy

Two additional forces drive the global climate system. One cited often in the scientific literature but recently challenged is the Milankovitch explanation. The Russian scientist M. M. Milankovitch argued that the eccentric orbit of the earth established its major global climatic cycle of 100,000 years. During that time the planet goes through a full interglacial/glacial cycle. Within this longer pattern, another one 41,000 years in duration controls the amount of solar energy reaching the Earth's higher latitudes. It is caused by the tilt of the earth on its axis.

A much shorter cycle caused by the "wobble" of the earth on its axis occurs either at 23,000- or 19,000-year intervals and affects the amount of radiation striking the low latitudes and the equator. Milankovitch argued that during the last 800,000 years, Earth experienced eight complete glacial/interglacial cycles. The ice ages lasted for 90,000 years followed by 10,000-year periods of warming. Accordingly, the current interglacial phase should be coming to an end.

Since the Milankovitch explanation accounts for only 0.1 percent change in the total solar energy reaching the earth, however, some climatologists have looked elsewhere for a more coherent driving force behind climate change. They argue that fluctuations in solar energy follow a cyclical pattern of sunspot activity. Using this pattern, they have identified a pattern of eight cycles during the last 720,000 years of the Earth's history. They are ninety thousand years in length, from full glacial with -0.3 percent of solar energy output to full warming with +0.3 percent. Given the dynamic changes in the earth's history and the gaps in our knowledge about its physical and biological properties however, predictions about future global climate changes remain illusive, despite the existence of this cyclical pattern.

The Impact of Climate Changes on World History

A warming phase during the last major ice age 33,000–26,000 BCE may have eased the migration of anatomically modern humans from Africa and Southwest Asia into Europe, replacing the resident Neanderthals. Before rising global sea levels eliminated the passage from Siberia to North America, this warming phase allowed human hunters to cross the frozen Bering Straits. In successive waves, possibly beginning as early as 32,000 BCE but no later than 11,000 BCE, they followed the hunt and populated the Americas.

As the last glacial maximum was ending about 13,000 BCE, a time when rising temperatures on Greenland approximated current ones, the retreat of the glaciers was interrupted by two little ice ages, the Older Dryas at 12,100 BCE and the Younger Dryas at 10,800 BCE. (A dryas is an Arctic flower that grew in Europe during the last ice age.) Evidence that the warm water circulation failed to reach the northern hemisphere around 12,700 BCE and inaugurated the Younger Dryas suggests that glacial melt entering the North Atlantic at the end of the last glacial maximum either slowed or stopped the Deep Water Circulation. It transformed the northern temperate regions into a little ice age for the next 1,300 years. The landscape of the British Isles became permafrost, with

summer temperatures dropping below 32° C and winter ones below -10° C. Icebergs floated to the Iberian coast and long periods of drought affected Asia, Africa, and the midcontinent of North America. The slowdown of the Atlantic circulation may have been responsible for the changing hemispheric climate.

Climatic Impacts on Indo-European Civilizations

Little ice ages have punctuated world history during these warming phases. As a result of cooling, the once fertile pastoral civilization of the Sahara collapsed, forcing the migration of its inhabitants to the Nile River valley about 5500 BCE. This settlement along the Nile coincided with the millennia-long rise of the ancient Egyptian civilization. Between 5000 and 4500 BCE, the Egyptians established their first empire and within centuries built the great pyramids at Giza. The Harappa civilization in the Indus valley flourished as well, constructing public buildings and private dwellings of mud and fired bricks and using geometric plans to organize its cities.

From 4500 to 3800 BCE, a global chill interrupted human progress with seemingly endless periods of drought. The global climate may have been colder than at any time since the Younger Dryas. As happened during earlier periods of cold and arid conditions, the human population migrated south, escaping from the most extreme climatic conditions. Farming populations, the descendants of Indo-Europeans who in progressive migrations had brought farming technology into western and northern Europe from Southwest Asia many thousands of years before, were forced by the cold climate to retreat southward. They retreated to warmer regions along the Mediterranean and southeastward to Ukraine, to Southwest Asia, India, and into northwest China.

Another protracted cold period brought drought to the irrigation-dependent “fertile crescent” civilizations of the Tigris, Euphrates, and Indus valleys between 3250 and 2750 BCE. In fact, some archaeologists suggest that the lush, naturally irrigated landscape in modern southern Iraq may have been the location of the biblical “Garden

of Eden.” Recent archaeological research has verified that the collapse of the great agricultural Akkadian empire in northern Mesopotamia (3200 to 2900 BCE) coincided with a major volcanic eruption and a subsequent climate shift from moist and cool to dry and hot that lasted for more than a century. These concurrent events forced this ancient population to leave the north and migrate into southern Mesopotamia (modern Iraq).

The Rise and Fall of the Mayan Civilization

Another global cold spell that lasted from 2060 BCE to 1400 CE had beneficial effects turning tropical and subtropical regions into cooler and dryer climates. In Central America, the Mayan civilization expanded its agricultural productivity northward into the Yucatan, now part of Mexico, and built pyramids and cities in areas formerly thick with tropical vegetation and malaria-bearing mosquitoes. They remained there for about a thousand years.

Years without rainfall caused a series of collapses in Mayan agricultural productivity. Sedimentary records suggest that droughts began 1200 CE and revisited the region for the next five hundred years. They abandoned some cities in 1240 CE and the remaining ones in 1190 CE, when another severe dry period hit the area. Other causes may have contributed to the demise of the Mayans but the relationship of climate change to the collapse is a compelling one. After this particular global chill ended, the hydrological cycle gained strength as the climate warmed. The tropical forest returned along with the mosquitoes and forced the remaining Mayans to abandon their homes and to migrate southward. The fact that Mayan ruins are discovered now in the dense tropical rain forests of Central America is evidence of more recent global warming.

With the stronger hydrological cycle of the last 150 years, pioneers have cleared forests for agriculture, growing seasons have expanded, and more food has become available for a growing population. The relationships between climate change, the migration of human and animal populations, and the rise and decline of civilizations

The Greenhouse Effect vs. Global Warming

The following points out the difference between what is called the greenhouse effect and the phenomenon of global warming.

The *greenhouse effect* is the name applied to the process which causes the surface of the Earth to be warmer than it would have been in the absence of an atmosphere.

Global warming is the name given to an expected increase in the magnitude of the greenhouse effect, whereby the surface of the Earth will almost inevitably become hotter than it is now.

Let's establish why there is a greenhouse effect.

The surface of the Earth is warmer than it would be in the absence of an atmosphere because it receives energy from two sources: the Sun and the atmosphere.

The atmosphere emits radiation for the same reason the Sun does: each has a finite temperature. So, just as one would be warmer by sitting beside two fireplaces than one would have been if one fireplace

were extinguished, so one is warmer by receiving radiation from both the Sun and the atmosphere than one would be if there were no atmosphere.

Curiously, the surface of the Earth receives nearly twice as much energy from the atmosphere as it does from the Sun. Even though the Sun is much hotter, it does not cover nearly as much of the sky as does the atmosphere. A great deal of radiation coming from the direction of the Sun does not add up to as much energy as does the smaller portion of radiation emitted by each portion of the atmosphere but now coming from the whole sky (it would take about 90,000 Suns to paper over the whole sky).

So, it isn't even as if our atmosphere had only a minor influence on the surface temperature; it has a profound one. In the absence of an atmosphere the Earth would average about 30 Celsius degrees (about 50 Fahrenheit degrees) lower than it does at present. Life (as we now know it) could not exist.

Source: Fraser, A. B. Retrieved 28 Jul 2004 from <http://www.ems.psu.edu/~fraser/Bad/BadGreenhouse.html>

will require more detailed study before global climate change becomes more accepted as a causal factor in world history.

The Most Recent Little Ice Age

Evidence from sediments and ice cores reveal that a little ice age (shorter than the typical 80,000 to 90,000 years) of long duration from approximately 1300 to 1850 CE swept across the northern hemisphere. Viking outposts in Greenland populated during the Medieval Warm Phase (800–1300 CE) succumbed to the freeze between 1200 and 1300 CE. Food production plummeted in preindustrial Europe. Even in the best of times, where diets consisted mostly of bread and potatoes, daily food consumption seldom exceeded 2,000 calories. Widespread malnutrition was followed by famine and the outbreak of infectious diseases.

The bubonic plague followed the great European famine in 1400 CE. Between 1100 and 1800 CE, France

experienced frequent famines, twenty-six in the twelfth century and sixteen in the nineteenth century. Increasing cold temperatures shortened the growing season by at least one month in northern European countries and the elevation for growing crops retreated about 18 meters. In New England, 1815 CE was called "the year without a summer." With the warming after 1850 CE, this little ice age came to an end.

Climate Change: The Future

Examining climate events in history and reviewing the scientific findings of the present suggest that no single cause can adequately explain significant climate oscillations. The convergence of many changes in the world's oceans, atmosphere, and land causes the disruptions and outbursts that we identify as significant climate events. These events possess such complex and unpredictable characteristics that to date the most advanced computers and global climate models (GCMs) have been unable to predict future climate events.

Lost, yesterday, somewhere between sunrise and sunset, two golden hours, each set with sixty diamond minutes. No reward is offered, for they are gone forever. • HORACE MANN (1796–1859)

Despite our fragmentary knowledge of past climate events, knowing what to do in the future presents us with a great challenge. Population growth into coastal areas and onto marginal lands makes catastrophes more likely during periods of abrupt change. Increases in material consumption and energy use will continue to place stress on global ecosystems. The goal of sustainable growth in the developed world and the expectations for the same in the developing world remain elusive. In the words of Vaclav Smil (1990, 23), “If concerns about planetary warming will help to bring some sanity into the craven pursuit of economic growth and personal affluence throughout the rich world, and if they will aid in promoting control of population growth and responsible development policies in the poor world, then a warming trend might actually be an effective catalyst of desirable changes.”

Anthony N. Penna

Further Reading

- Alley, R. B. (2000). Ice-core evidence of abrupt climate changes. *Proceedings of the National Academy of Sciences of the United States of America*, 97(4), 1331–1334.
- Caviedes, C. N. (2001). *El Niño in history: Storming through the ages*. Gainesville: University Press of Florida.
- Congressional Budget Office. (2003). *The economics of climate change: A primer*. Washington, DC: United States Government Printing Office.
- Culver, S. J., & Rawson, P. F. (Eds.). (2000). *Biotic response to global change: The last 145 million years*. Cambridge, UK: Cambridge University Press.
- DeBoer, J. Z., & Sanders, D. T. (2002). *Volcanoes in human history: The far reaching effects of major eruptions*. Princeton, NJ: Princeton University Press.
- Diaz, H. F., & Markgraf, V. (2000). *El Niño and the southern oscillation: Multiscale variability and global and regional impacts*. Cambridge, UK: Cambridge University Press.
- Dürschmied, E. (2000). *The weather factor: How nature has changed history*. New York: Arcade.
- Dyurgerov, M. B., & Meier, M. F. (2000). Twentieth century climate change: Evidence from small glaciers. *Proceedings of the National Academy of Sciences of the United States of America*, 97(4), 1406–1411.
- Fagan, B. (1999). *Floods, famines, and emperors: El Niño and the fate of civilizations*. New York: Basic Books.
- Glantz, M. H. (2001). *Currents of change: Impacts of El Niño and La Niña on climate and society*. Cambridge, UK: Cambridge University Press.
- Global warming: New scenarios from the Intergovernmental Panel on Climate Change. (2001). *Population and Development Review*, 27(1), 203–208.
- Jones, P. D., Ogilvie, A. E. J., Davies, T. D., & Briffa, K. R. (Eds.). (2001). *History and climate: Memories of the future?* New York: Kluwer Academic/Plenum.
- Keys, D. (2000). *Catastrophe: A quest for the origin of the modern world*. London: Ballantine.
- Ladurie, E. L. (1971). *Times of feast, times of famine: A history of climate since the year 1000*. Garden City, NY: Doubleday.
- Lovvorn, M. J., Frison, G. C., & Tieszen, L. L. (2001). Paleoclimate and Amerindians: Evidence from stable isotopes and atmospheric circulation. *Proceedings of the National Academy of Sciences of the United States of America*, 98(5), 2485–2490.
- Marotzke, J. (2000). Abrupt climate change and thermohaline circulation: Mechanisms and predictability. *Proceedings of the National Academy of Sciences of the United States of America*, 97(4), 1347–1350.
- McIntosh, R. J., Tainter, J. A., McIntosh, S. K. (2000). *The way the wind blows: Climate, history, and human action*. New York: Columbia University Press.
- National Assessment Synthesis Team. (2001). *Climate change impacts on the United States*. Cambridge, UK: Cambridge University Press.
- Novacek, M. J., & Cleland, E. E. (2001). The current biodiversity extinction event: Scenarios for mitigation and recovery. *Proceedings of the National Academy of Sciences of the United States of America*, 98(10), 5466–5470.
- Perry, C. A., & Hsu, K. J. (2000). Geophysical, archaeological, and historical evidence supports a solar-output model of climate change. *Proceedings of the National Academy of Sciences of the United States of America*, 97(23), 12433–12438.
- Pierrehumbert, R. T. (2000). Climate change and the tropical Pacific: The sleeping dragon Wakes. *Proceedings of the National Academy of Sciences of the United States of America*, 97(4), 1355–1358.
- Smil, V. (1990). Planetary warming: Realities and responses. *Population and Development Review*, 16(1), 1–29.
- Smil, V. (2003). *The earth's biosphere: Evolution, dynamics, and change*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Webb, T., III, & Bartlein, P. J. (1992). Global changes during the last 3 million years: Climatic controls and biotic responses. *Annual Review of Ecology and Systematics*, 23, 141–173.
- Western, D. (2001). Human-modified ecosystems and future evolution. *Proceedings of the National Academy of Sciences of the United States of America*, 98(10), 5458–5465.

Coal

People have known about coal since antiquity, but people did not begin to use coal for fuel on a large scale until the nineteenth century. The physical labor of humans and animals, firewood, and vegetable coal were the main energy resources until the first energy transition—to the use of fossil fuels. The “wooden hunger” that Europe suffered during the seventeenth and eighteenth centuries as a consequence of high energy wooden con-

sumption rates by metal foundries led to several technical innovations as the “miners friends”: Steam pumping which enabled the coal mines exploitation. This artifact is the origin of the steam engine. Such innovations allowed large quantities of coal to be extracted for use as coke fuel in smelting ovens.

The Industrial Revolution occurred mainly in the carboniferous basins of the Old Continent (Europe), and coal was the main fuel for locomotives and other steam machines. The level of economic development in industrialized countries determined the chronology of their transition to the use of fossil fuels. A narrow correlation existed between coal consumption and level of industrialization during the nineteenth century. The British fleet played an important role in the expansion of coal use worldwide as cargo ships in this fleet monopolized the coal traffic in the nineteenth century. The British cargo ships also helped to organize coal distribution nets worldwide. However, the geography of the coal trade during the twentieth century modified these marine routes.

In the nineteenth century, the work carried out in the coal mines was done manually, frequently by children, and only pumping was mechanized. The machinery application in the mine pumping spread to the rest of the

mining works at the dawn of the twentieth century. Since then surface exploitation has increased, and the number of workers has decreased. Consequently productivity has increased as labor conditions have improved and accidents have decreased.

Great variations exist in gas production areas. For example, productivity in China varies from 90 metric tons per worker a year in less advanced mines to 1,100 metric tons per worker a year in advanced mines.

During the nineteenth century people already worried that the supply of coal might run out. For example, the English economist and logician W. Stanley Jevons was concerned that the exhaustion of Britain’s coal supply might contribute to the decline of the British empire.

New discoveries of coal enlarged its geography, but the pollution caused by burning coal in domestic and industrial use endangered human health. For example, the high concentration of London smog during the period 4–10 December 1952 killed more than four thousand people.

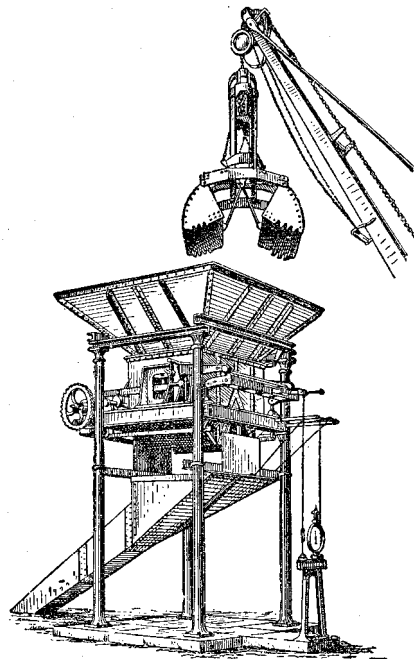
The second energy transition was to petroleum, but the transition did not end the use of coal. In fact, after the oil crises of the 1970s, a recovery in the use of coal took place. During the nineteenth century and until 1914, coal provided about 90 percent of the primary energy from fossil fuels consumed in the world. Between 1930 and 1960

that percentage decreased from 70 to 50. The prevalence of petroleum was not settled down until the 1960s.

Two main markets for international coal trade appeared: (1) the steam coal market for power



Camels in Beijing, China laden with coal in the late nineteenth century. In the twenty-first century coal remains a major energy source in China and is often transported on hand carts and bicycle carts.



generation in Asia and (2) the coke coal market for use by metallurgists. Since 1978 world steam coal production has risen more than 35 percent. The high price of petroleum since that time has fostered the recovery of coal applications in power-generating stations. In other words, the high petroleum prices during the 1970s meant that many power stations had to again use coal as a primary energy. However, coke coal production maintained its level during the 1970s.

Since the nineteenth century the geography of coal production and trade has changed considerably. In 1900 world production totaled 0.6 billion metric tons; the top producer was Europe with 0.45 billion metric tons (United Kingdom, 0.18 billion metric tons). World coal production rose steadily from 1 billion metric tons in 1946 to 3.6 billion metric tons in 1996. The United States produces 1 billion metric tons per year. China's production has grown since the 1980s to satisfy the demands of the country's rapid industrialization. China today produces 1.3 billion metric tons. South Africa and Australia, basically export oriented, also have increased their production.

Only ten countries have substantial coal reserves, whereas Europe and the Pacific Rim suffer from a great coal deficit, which leads to a great maritime trade due to the fact that coal traffic to Europe and other coal consuming countries was by sea. The threat of the exhaustion

The Industrial Revolution ran on vast quantities of fuel and created a need for accurate weighing coal. This automatic coal weighing machine developed in Great Britain was used to quickly and accurately measure coal delivered to factories.

of supplies that worried W. Stanley Jevons has disappeared. However, today experts are concerned about growing carbon dioxide emissions and their impact on climate change as well as the increase in acid rain. Asian industrial development, especially that of China, also indicates a great uncertainty for the future of coal.

Andrés Sánchez-Picón

Further Reading

- Cipolla, C. M. (1978). *The economic history of world population*. Harmondsworth, UK: Penguin Books.
- Etemad, B., & Luciani, J. (1991). *World energy production, 1800–1985*. Geneva, Switzerland: Droz.
- McNeill, J. R. (2001). *Something new under the sun: An environmental history of the twentieth-century world*. New York: Norton.
- Organisation for Economic Co-Operation and Development. (1997). *International coal trade: The evolution of a global market*. Washington, DC: Author.
- Smil, V. (1994). *Energy in world history*. Boulder, CO: Westview.

Coffee

Over the last five hundred years coffee has joined distant and distinct peoples in fincas (rural properties), factories, coffeehouses, and around coffee tables. Its different meanings and uses have accompanied dramatic changes in its passage from Africa to the Middle East, the Indian Ocean, Europe, Latin America, and the United States, and lately as far as Australia and East Asia. Coffee production, marketing, and consumption have been intimately involved in the creation of the modern world, for good and for bad. Coffee has helped fuel the expansion of the modern world economy and has helped energize the industrial workforce. It also prolonged the use of slaves while industrializing food production, enriched colonial empires while opening bourgeois spaces for the defense of civil liberties. Originally consumed by hunters and warriors, coffee became an aristocratic luxury, then

a bourgeois treat, and finally a mass necessity—only to reemerge recently as an object of distinction in the age of specialty coffee.

Origins

Although the origins of the term *coffee* are disputed, most scholars today agree that it probably derives from the corruption of an Arabic word *qahwah*, which was a derogatory word for liquor, a prohibited beverage in Islam. Numerous species of trees and bushes and many more cultivars produce the “bean” (a corruption of the Arabic word for coffee, *bunn*), for coffee, which is actually a seed more like the pit of a cherry.

Coffee appeared naturally in various parts of Africa. The most common and valuable species, *Coffea arabica*, spread from Harrar (today in Ethiopia), where beans were harvested from wild trees. There it was sometimes a hospitality drink flavored with salt, butter, or spices, or used as an energy pill for hunters, who included it ground with balls of fat to provision their trips.

Coffee’s first appearance in written history is disputed. Historians who seek to make it an aged good point to questionable passages in the *Odyssey* and the Bible as evidence of great antiquity. Others cite references in Arabic texts from around the year 800 CE. As far as world history is concerned, we can safely put its beginnings as a commodity at the end of the fifteenth century, but in Yemen, not in Ethiopia.

The Shadhili Sufi sect of Islam, based in Yemen, are generally accepted as the group who popularized a drink made from roasted and ground arabica coffee beans suffused in hot water. They certainly did not set out to stimulate world trade. On the contrary, they sought to flee the material world to reach spiritual fulfillment. The caffeine in coffee served to keep them awake in their religious chanting rituals, which they celebrated at night. But as worldly people with day jobs, they spread the popularity of the drink in the secular world as well.

By the middle of the fifteenth century coffee was so associated with Islam that the Coptic Christians of Ethiopia forbade it. However Muslims found coffee and its stepchild, the coffeehouse, enticing. It was particularly well

suited to the observation of Ramadan, the month of obligatory fasting during daylight. Coffee and the coffeehouse created a public nighttime activity. Muslims on pilgrimages to Mecca for the Hajj acquired the coffee-drinking custom and spread it as far east as Indonesia and India, west to West Africa, and north to Istanbul and the Balkans. Despite this growing market for coffee, until the end of the 1600s almost all coffee in world trade was grown in the small, irrigated gardens cut into Yemen’s steep hillsides. Production was small, (12,000 to 15,000 metric tons per year) and the price high, enhanced by Ottoman taxes and the cost of transporting by camel caravans or boats.

Spread to Europe and Its Colonies

Coffee drinking spread nonetheless. By the middle of the 1500s the centers of coffeehouse culture were Istanbul, Cairo, and Damascus. Men from many walks of life enjoyed the drink and the cafes, which were centers of artistic, intellectual, political, and mercantile life (women only drank coffee in the home or at special baths).

European Christians adopted the habit of drinking coffee initially because it was associated with the splendor and wealth of the Ottoman Turks, whose empire was at its height in the sixteenth and seventeenth centuries. Served in porcelain, newly arrived from China, and on plates made from Mexican silver, spiced with sugar from the Caribbean (Muslims had used cardamom rather than sugar) and joined with tobacco from the Americas, coffee was a mark of distinction for the rising masters of the world economy, who sipped it in luxurious salons.

Coffea arabica became a middle-class drink in England, where it was probably a Greek merchant who first opened a coffeehouse in Oxford and then in London in the mid-1600s. The Puritan English became leading European consumers of coffee until tea overshadowed it in the 1700s. Northern Europeans adopted the coffee habit, and Amsterdam became the principal coffee market. This led the Dutch to seek to control production as well as commerce. Beginning in the 1690s, Yemen’s leadership position in production was gradually dislodged when the Dutch transplanted coffee to their



colony in Java (today in Indonesia). The French began growing coffee in the Indian Ocean island of Réunion and the British in Ceylon (today Sri Lanka). The eighteenth and nineteenth centuries witnessed the apogee of coffee colonialism. Almost all coffee was grown in Dutch, French, and British overseas colonies, with the French colony of Saint Domingue (today Haiti), becoming the world's largest producer, exporting some 40,000 metric tons in 1789.

European control of the trade led to an intensification of the use of African slaves to grow the crop. Although slavery had been known in Ethiopia and Yemen, coffee producers seem to have been peasants, as they were in Java. In the Americas, however, which had already imported millions of African slaves to grow sugar, coffee became connected with human bondage.

The nineteenth century saw another great transformation of the world coffee market as two new players entered the arena: Brazil (a coffee-producing nation) and the United States (a coffee-consuming nation). Brazil turned to coffee production after a slave revolt on Saint Domingue almost ended the island's coffee production. World prices skyrocketed. Brazil, independent after 1822, was the world's primary coffee producer by the 1850s. Its vast fertile fields and the importation of over a million African slaves (slavery was not abolished in Brazil until 1888) allowed Brazilians to lower production costs and reduce the world price of coffee. By late in the nineteenth century, coffee became increasingly a mass beverage available to the working class in both the coffee-buying and coffee-growing countries. This trend was particularly noticeable in what became the world's largest coffee market, the United States.

A tea-drinking colony under the British, the United States turned to coffee under the influence of the low price of Brazilian coffee and the immigration of millions of Europeans, for whom coffee was a status symbol. Per capita consumption grew in the nineteenth century from well under a pound in 1800 to thirteen pounds in 1900. World coffee imports grew fifteen-fold during the nineteenth century with the United States responsible for almost half the expansion of consumption. In terms of

the value of international commerce, coffee trailed only grains and sugar as a world commodity in 1900.

Coffee in the Twentieth and Twenty-First Centuries

The twentieth century introduced more dramatic changes in the world coffee economy. The cultivar *Coffea arabica*, which had been virtually the only source for the world coffee economy since its inception, was joined by *Coffea robusta* at the end of the nineteenth century. Native to equatorial Africa, robusta matured faster and, more importantly, was resistant to the leaf blight, *hemileia vastatrix*, which destroyed the coffee plantations of Java, Ceylon, and the Philippines in the last decades of the nineteenth century. The robusta permitted those countries to return to coffee cultivation. Late in the twentieth century new variants of the arabica and the robusta that were shorter, more disease resistant, and with higher yields were developed. They led to more intensive farming, with five to six times more bushes per hectare and greater investments in fertilizers, pesticides, and processing equipment and smaller, monocultural plots.

The processing and marketing sides also reflected the greater dependence on capital. In 1900 green (raw and unroasted) beans sold according to their port of provenance comprised the great majority of coffee traded. Importers sold them to wholesalers, who roasted and ground the beans themselves or sold the green beans to consumers, usually housewives, who did the final roasting, grinding, and brewing at home. Gradually packaged, industrially roasted and trademarked coffee took over the market. The vacuum-sealed can allowed local companies to become regional, and after World War II, national. The invention of decaffeinated coffee and instant coffee, which became popular after mid-century, increased the processors' share of the final retail price. Chain stores and supermarkets further concentrated production among an ever smaller number of huge roasters and food conglomerates. In the last decades of the twentieth century, mergers and takeovers allowed a few gigantic diversified companies to dominate production in many parts of the world. Large investments in advertising and market

Personally I stay away from natural foods. At my age I need all the preservatives I can get. • GEORGE BURNS (1896–1996)

power to secure shelf space in supermarkets allowed the concentration of the industry to continue.

Until after World War II the largest share of the final price of green coffee went to coffee growers and merchants. As processing and marketing technology grew, a greater share of the final price was pocketed by the processors. Calculations vary greatly, but whereas growing counties by one estimate earned about half of the final price in 1950, today they take in only 10 to 15 percent, though marketers of what is known as fair-trade coffee offer above-market prices to growers.

As early as 1906, growers began making efforts to protect their market share and to bolster prices on the world market, a trend that culminated in the 1961 International Coffee Agreement (ICA). The agreement was partially a result of Cold War fears that the 1959 revolution in Cuba would repeat itself in the poor and troubled coffee-growing countries of Latin America. For twenty-eight years the ICA negotiated quotas and prices with growers and buyers to insure that growers received a living wage. When the collapse of the Soviet Union in 1991 ended the Cold War, fears of Communist revolutions waned, and the United States decided to push for global free trade. Coffee support prices were among the first victims as the United States withdrew from the ICO. A handful of major food conglomerates became the masters of the world coffee economy.

In the early 2000s more than 100 countries worldwide grow some 17 million metric tons of coffee. Latin America, especially Brazil, is still the leading supplier. But its dominance has been challenged since the 1960s by Africa, especially the Ivory Coast, though production has fallen of late because of internal unrest. Indonesia has once again become a major producer, and Vietnam is a newly emergent major producer. The United States is still the largest consumer, but its per capita use has steadily declined since the 1960s as consumers increasingly imbibe caffeine in soft drinks. Brazil is today the world's second-largest consumer, and Japan has become the world's fifth largest. Chinese imports of coffee doubled between 1997 and 2002. Ironically, coffee, which originated in Africa and gained popularity in the Middle East

five hundred years ago, is now seen in East Asia as a symbol of Western modernity.

Steven Topik

Further Reading

- Bates, R. (1997). *Open politics economy: The political economy of the world coffee trade*. Princeton, NJ: Princeton University Press.
- Bernstein, I. (1993). *Coffee floats, tea sinks: Through history and technology to a complete understanding*. Roseville, Australia: Helian Books.
- Dean, W. (1976). *Rio Claro: A Brazilian plantation system, 1820–1920*. Stanford, CA: Stanford University Press.
- De Oliveira, J. T. (1984). *História do café no Brasil e no mundo* [The history of coffee in Brazil and the world]. Rio de Janeiro, Brazil: Livraria Kosmos.
- Digum, G., & Luttinger, N. (1999). *The coffee book: Anatomy of an industry from crop to the last drop*. New York: New Press.
- Ellis, A. (1956). *The penny universities: A history of the coffee houses*. London: Secker and Warburg.
- Hattox, R. (1985). *Coffee and coffeehouses: The origins of a social beverage in the medieval Near East*. Seattle: University of Washington Press.
- Heise, U. (1987). *Coffee and coffeehouses*. (P. Roper, Trans.). West Chester, PA: Schiffer Publishing.
- Jacob, H. E. (1935). *Coffee: The epic of a commodity* (E. Paul & C. Paul, Trans.). New York: Viking Press.
- Laërne, C. F. V. D. (1885). *Brazil and Java: Report on coffee-culture in America, Asia and Africa*. London: W. H. Allen & Co.
- Paige, J. (1997). *Coffee and power: Revolution and the rise of democracy in Central America*. Cambridge, MA: Harvard University Press.
- Palacio, M. (1980). *Coffee in Colombia, 1850–1970: An economic, social and political history*. New York: Cambridge University Press.
- Pendergrast, M. (1999). *Uncommon grounds: The history of coffee and how it transformed our world*. New York: Basic Books.
- Pérez Brignoli, H., & Samper, M. (Eds.). (1994). *Tierra, café y sociedad* [Land, coffee, and society]. San José: FLACSO.
- Roseberry, W., Gudmundson, L., & Samper, M. (Eds.). (1995). *Coffee, society, and power in Latin America*. Baltimore: Johns Hopkins University Press.
- Smith, W. C., & Topik, S. (Eds.). (2003). *The global coffee economy in Africa, Asia, and Latin America, 1500–1989*. New York: Cambridge University Press.
- Stein, S. J. (1985). *Vassouras: A Brazilian coffee county* (2nd ed). Princeton, NJ: Princeton University Press.
- Stolcke, V. (1988). *Coffee planters, workers and wives*. Basingstoke, UK: Macmillan.
- Talbot, J. (1997). Where does your coffee dollar go: The division of income and surplus along the coffee commodity chain. *Studies in Comparative International Development*, 32(1), 56–91.
- Taunay, A. D. E. (1939–1943). *Historia do café no Brasil* [History of coffee in Brazil]. Rio de Janeiro, Brazil: Departamento Nacional de Café.
- Thurber, F. B. (1881). *Coffee: From plantation to cup*. London: Trow's.
- Topik, S., & Wells, A. (1998). *The second conquest of Latin America*. Austin: University of Texas Press.
- Ukers, W. (1935). *All about coffee*. New York: The Tea and Coffee Trade Journal.
- Weinberg, B. A., & Bealer, B. K. (2001). *The world of caffeine: The science and culture of the world's most popular drug*. New York: Routledge.