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1. Introduction

The highest principle of Kant's theoretical philosophy is that all cognition must "be combined in one single self-consciousness" (A 117a, B 136).¹ Elsewhere I have tried to explain why he believed that all cognition must belong to a single self (Kitcher 1982); here I try to clarify the other half of the doctrine. What led him to the claim that all cognition involved self-consciousness? This question is pressing, because the thesis strikes many as obviously false (for example, Bennett 1966, 105).

My interpretive hypothesis begins from three clues. First, Kant characterized the self-consciousness at issue as "transcendental" (for example, B 132), meaning both that it is a necessary condition for the possibility of cognitive experience and that it involves factors not derived from the senses.² (I mark this special usage with

I presented ancestors of this paper to a number of helpful audiences, including the 1995 Kant Congress, the 1996 Chapel Hill Colloquium, an early modern logic conference at Western Ontario, a conference on self-reference in Hannover (Germany), and the departments of philosophy at Vermont, Colorado, Arizona, UC Irvine, Toronto, and Columbia. In three cases (1995a, 1997, forthcoming), earlier efforts were published with conference proceedings. The present paper reflects quite a different understanding of Kantian self-consciousness and should be taken as my considered view. I am also grateful to Philip Kitcher and to several editors and readers of *The Philosophical Review* for supererogatory amounts of constructive criticism.

¹References to the *Critique of Pure Reason* are given with the usual "A" and "B" indications of editions. Quotations will be my translations, although I have consulted Kemp Smith 1968, Pluhar 1996, and Guyer and Wood 1998. All references to Kant's works other than the *First Critique* will be to Kant 1902, and will be cited as "Ak.", followed by the volume and page numbers. In translating the German passages, I have consulted Hatfield 1997, Walford and Meerbote 1992, and Young 1992; I rely on the Latin translations from Walford and Meerbote.

²I defend this reading of 'transcendental' in Kitcher 1995b. Kant gave an especially clear account of 'transcendental' in the appendix to the Prolegomena: "the word transcendental . . . means not something that goes outside all experience, but what indeed precedes experience (*a priori*), even though it is destined to nothing more than exclusively to make cognition from experience possible" (Ak. 4:374).

capitals.) Second, in passages dealing with Self-Consciousness, he often alluded to a consciousness of spontaneous mental acts or activities (A 78 / B 103, A 103, A 108, B 132, B 134, B 135, B 158). Finally, many of these same passages contain qualifications about the sort of consciousness involved: A 78 / B 103 notes that although [acts of] synthesis are indispensable for cognition, we are conscious of them “only very rarely [*selten nur einmal*]”; at A 103–4, the consciousness is described as “feeble” [*schwach*] and lacking in clarity (see also B 133 and 134).

In light of these three clues, I believe that Kantian Self-Consciousness involves a necessary consciousness of mental activities that are required for cognition, but a consciousness that does not enable the subject clearly to see these activities for what they are. To develop this interpretation, I will explain what Kant meant by “consciousness” in this context (section 2), how his theory of a self emerged from his theory of cognition (sections 3 and 4),³ and why it was reasonable for him to claim that cognition required “consciousness” in this sense of a “self” in this sense (section 3). I will also argue that Kantian Self-Consciousness is a plausible variety of self-consciousness: it is a kind of consciousness (sections 2 and 3) and it is of something reasonably characterized as a “self” (section 4). Since Kant denied that subjects were explicitly conscious of a “fixed and abiding” self (A 107, cf. B 134), I begin by considering varieties of implicit consciousness in circulation by 1781.

2. Obscure Consciousness and the Objects of Consciousness

Obscure Consciousness

Leibniz had maintained that we must be conscious of many perceptions that we cannot report. Most famously, he argued that we must hear all the little waves that make up the roar of the ocean because:

To hear this noise as we do, we must hear the parts that make up this whole, that is, the noise of each wave, although each of these little noises makes itself known only when combined confusedly with all the

³Here I agree with Dieter Sturma’s position that Kant’s thinking about Self-Consciousness emerged from his analysis of the preconditions for cognition (1985, for example, 30).

others, and would not be noticed if the wave which made it were by itself . . . [w]e must have some perception of each of these noises, however faint they may be; otherwise there would be no perception of a hundred thousand waves, since a hundred thousand nothings cannot make something. (Leibniz [1765] 1982, 54)

Kant's commitment to the existence of minute perceptions or, in his terminology, "obscure [*dunkel*] representations" is clear (B 414–15a, Ak. 7:135). His lectures on psychology offered a persuasive example:

we are not conscious that the Milky Way, when we observe it just by sight, consists of clear small stars, but through the telescope we see that. Now we conclude that since we have seen the whole Milky Way, then we must also have seen all the individual stars. For were that not the case, then we would have seen nothing. What we have seen, however, we must also have represented to ourselves. Since we know nothing of these representations, so must they have been obscure. We have, therefore, obscure representations, and these to be sure in so great a quantity that it exceeds by a wide margin the number of our clear representations. (Ak. 29:879)

Kant's conclusion that we must be obscurely conscious of the stars was based on reasoning exactly like Leibniz's. Unless we have seen the individual stars, that is, unless the light from individual stars has registered on some piece of the retina, then we would see nothing, presumably because a vast number of non-registrations could not make a visual image.

Obscure representations were also invoked to explain cognitive tasks beyond mere perception. As we will see below (369), Kant believed that concept use required an "obscure consciousness" of the "marks" of concepts. In a discussion with which he may have been familiar (B 414–15a, below, 381), Condillac considered the case of reading. Although subjects do not report any awareness of the shapes of letters, but only an awareness of the senses of the words, Condillac argued that they must be conscious of letter shapes in some sense, because their conduct, reading, could be explained only on the assumption that they were so conscious. On his view, consciousness could sometimes be so superficial that it left no memory trace ([1746] 1987, 445).

Because of classic examples such as Leibniz's ocean roar, the issue of insensible, unreportable, or obscure representations was sometimes cast in terms of discernment or differentiation (Tetens [1777] 1979, 1:263). Could subjects differentiate their represen-

tations of the sounds of individual waves from their representation of the overall roar of the ocean? To test for consciousness or discernment, however, theorists would have to ask subjects (including themselves) whether they were conscious of some representational feature A, under some description (or other publicly available representational vehicle) of A, B, which the subjects could produce or assent to.⁴ Since the criterion was often mere discernment, B might be quite coarse, such as “a white blotch” in the case of the Milky Way, or even “some visual representation right now.”

Tying these reflections together, let us say that the working distinction for Kant’s predecessors and contemporaries between standard cases of consciousness, or having explicit representations, and implicit consciousness, or having minute or obscure representations, might be captured as follows. A subject is “explicitly conscious” of representational feature A, just in case the subject could, if asked, produce or affirm a publicly available representation, B, of A, where B provides a tolerably accurate (though possibly not very specific) representation that differentiates representational feature A from some relevant background (including such cases as differentiating some visual representation at a time or in a place from none at all). So subjects might be conscious of the Milky Way as “a white blotch in the sky.” A subject would be implicitly or obscurely conscious of representational feature C just in case (1) the subject’s representing feature C is necessary for the production of some explicitly conscious representation or for the performance of some other uncontroversial cognitive task, and (2) just on the basis of representing feature C, he could not affirm a publicly available, tolerably accurate representation of feature C that differen-

⁴Beyond verbal descriptions, subjects might indicate the contents of their representations by, for example, drawing a picture or humming a melody. Given this method for determining standard cases of consciousness, an inevitable epistemic gap entered the picture. Since consciousness of a representation or representational aspect could be established only through some type of public representation of that representation, which required both observation or memory of the representation and a public representational vehicle for indicating the representation, the test for standard consciousness was less than ideal. At B 414–15a, Kant noted that some consciousness was so faint that it was insufficient for memory; in *The Metaphysical Foundations of Natural Science*, he made the common observation that when subjects tried to observe their mental states, they changed them (Ak. 4:471).

tiated it from a relevant background. Although Kant knew about the myriad of stars from telescopic observation, he could not assent to the presence of any stars or even any separable points of light just on the basis of his (unaided) visual representation.

Descartes, Locke, and their followers believed that if subjects had a representation or were conscious of a representation, then they must know it. Kant thought we could “undoubtedly conclude” (Ak. 7:135) that we have *petites perceptions* or obscure representations, because these were required to explain reportable representations and other uncontroversial cognitive achievements. Although we come to recognize that we have obscure representations through inference, this does not imply that we are not really conscious of them, but have only inferential knowledge of them. After investigating the necessary antecedents or parts of explicit representations, we acquire an inferential knowledge of implicit representations; but for the explanatory account to be correct, we must have had them or been obscurely conscious of them all along. The Leibnizian hypothesis—accepted by Kant and many others—was that the Cartesians and the Lockeans were wrong. For theoretical reasons, we should infer that subjects also have *petites perceptions*, or are *conscious* (albeit obscurely) of, various unreportable representations.

Objects of Representation

Beyond distinguishing between explicit and obscure consciousness, modern philosophers considered the relation between ideas or representations and their objects. The issue was discussed in relation to some problematic cases. Descartes suggested that our idea of cold might be “materially false,” because it represented “cold” as a positive quality, whereas coldness itself was a privation (Cottingham, Stoothoff, and Murdoch 1984, 2:30). Margaret Wilson proposed that we gloss Descartes’s claim about material falsity as follows: “an idea of *n* might represent (present) *n* as other than *n* is” (1990, 10). As she argued, Descartes’s position is intelligible only if he regarded ideas as representing in two different senses. The idea of cold might “referentially represent” a certain property, coldness, which was in fact, a privation, but the idea might “present” coldness as a positive sensation. She noted further that, although Descartes’s claim makes sense only if he had some way of

determining what an idea referentially represents, his views on this issue were quite confused. He seemed to assume some version of a causal theory of objects of representation: an idea was of coldness just in case the idea was caused “in the right way” by coldness.⁵ But he could not have held a general causal theory, because he thought non-existents could be objects of representations (Wilson 1990, 11).

Beyond “privative” ideas like “coldness,” secondary quality ideas raised the suspicion that our ideas might present a property, P, as other than P is. As Locke explained, the ideas produced by secondary qualities do not resemble them; there is nothing “in the bodies we denominate from them” that resembles them ([1690] 1959, 1:173). As in the case of “coldness,” the question of whether secondary quality ideas were materially false could be posed only on the assumption of a distinction between what our ideas referentially represent and how that object or property is presented in the idea. Locke defended God against any hint of material deception by a subtle shift in the referential aspect of secondary quality ideas and by adopting a vacuous criterion for appropriate presentation. What our secondary quality ideas represented were not the primary qualities of bodies, but merely the “powers” of those bodies to produce appearances in the mind; these appearances were appropriate because they were “answerable” to these powers: “each of them [is] suitable to the power that produced it, *and which alone it represents*” ([1690] 1959, 1:521, my emphasis).

As Wilson explained, Descartes’s discussion of material falsity implies that he distinguished between something like the referential and the presentational aspects of representations, that is, between what the mind is aware of through its representation and, roughly, what it takes itself to be aware of through its representation (1990, 20 n. 10) or how it represents something. I have argued that Locke’s denial of the falsity of secondary quality ideas makes sense

⁵Descartes’s assumption of a causal theory is clear in the *Passions of the Soul*: “the various perceptions or modes of knowledge present in us may be called its passions, in a general sense, for it is often not our soul which makes them such as they are, and *the soul always receives them from the things that are represented by them*” (Cottingham, Stoothoff, and Murdoch 1984, 1: 335, my emphasis). J. M. Beyssade also suggests that Descartes was operating with a causal theory of the object of representation in sensory perception (1992, 11). Beyssade’s article led me to this unusually explicit text.

only if he also had some such distinction in mind. An elaboration of Wilson's own helpful example may make this intuitive distinction somewhat clearer. Suppose that one day Wilson took herself to have seen a tanager, considered how odd it was to find one in this location, prepared herself to take a photograph, and so forth, when what she was actually about to memorialize was an oriole. Under these circumstances, the referential aspect of her representation would have been the oriole, but the oriole would have been presented as a tanager. For ease in reference, I will label these two different aspects of representations their "R" (for "referential") and their "P" (for "presentational") "Contents." The fact that some moderns distinguished between R-Contents and P-Contents does not imply that they had a sound way of making the distinction. Like Descartes, Locke assumed a causal theory of R-Contents, but he seemed surprisingly indifferent to a problem that he should have understood very well—representations have many causes. Having explained the complex chain of causation required for objects to produce secondary quality ideas in us, he simply asserted that *what produced* secondary quality ideas (and hence what they alone represented) were the "powers" of bodies, with no explanation of why these should be privileged over the primary qualities of bodies, the "imperceptible bodies" that come into the eye, the motion of the sensory nerves, or the motions in the "seat of sensation" ([1690] 1959, 1:171–72).

Although Kant's predecessors were unable to determine exactly what the R-Contents and P-Contents of representations were, this distinction, and that between standard and obscure representations, opened up four possible ways of thinking about what subjects were conscious of when they had an idea or a representation:

<u>Explicit P-Contents</u>	<u>Implicit P-Contents</u>
Explicit R-Contents	Implicit R-Contents

(I have made the classification in terms of contents, but it could be cast equally well in terms of different sorts of consciousness, which was Kant's way. So consciousness of "Imp-P contents" could be described as "Imp-P-Consciousness.") Without undertaking extensive discussion of these four varieties of consciousness, let me address three obvious questions. How could subjects be explicitly conscious of the referential aspects of their representations? How could subjects be only implicitly conscious of the presentational

aspects of their representations? What, exactly, is implicit consciousness of R-Contents?

First, explicit consciousness of R-Contents may be very common. From the testimony of Berkeley ([1710] 1967, 2:42) and Hume ([1739] 1978, 193), the “vulgar” regularly offered reports about what they were conscious of, objects such as tables and chairs, just on the basis of their perceptions; under some modern and twentieth-century accounts of perception, these reports would be reasonably accurate (for example, Reid [1785] 1941, 82–83; Gibson 1966). Turning to the second question, if presentational contents pertain to what the mind takes itself to be aware of or how it represents something to itself, how could these be merely implicit?⁶ The possibility I have in mind is quite straightforward: whether or not subjects could report, or indicate by some publicly available representational vehicle, what they take themselves to be aware of or how they are representing something, theoretical and behavioral considerations might indicate that they represent X as a Y. Hence, although subjects could not report on Imp-P-Contents just on the basis of having representations with these contents, theorists can offer hypotheses about the presentational as well as the referential aspects of obscure representations.

Consider Kant’s more detailed account of what was involved in seeing the Milky Way. In a passage in the *Anthropology*, he explained why he fastened on particular obscure contents in this case:

Everything which the eye discovers when enhanced through the telescope . . . is seen by the eye alone, for these optical means bring no more rays of light and hence no more pictures into the eye than would have painted themselves on the retina without such ingenious devices. Rather, [the instruments] only enlarge the pictures so that we become conscious of them [that is can differentiate them]. (Ak. 7:135–36)

Given these theoretical considerations, Kant believed that we could infer from our magnified images of individual stars that we were also implicitly conscious of such images—that we represent the individual stars via such “pictures”—during unaided viewing of the Milky Way. The same sort of inference to Imp-P-Contents occurs in contemporary theories of vision. For example, David Marr ar-

⁶Wilson may have taken presentational contents to be invariably explicit. Since neither Descartes nor Locke accepted obscure representations, she had no need to consider the possibility of implicit P-contents.

gued that it was reasonable to infer that vision is mediated by the construction of a “2 ½-D sketch,” that is, a viewer-centered representation of surface discontinuities, depths, and orientations (1982, 277). He then raised the question of how the 2 ½-D sketch might represent this information. In particular, since depth and surface orientation can be computed from one another, how does the visual system represent this information to itself? Are both distance and surface orientation represented in this sketch, or is just one represented from which the other can be derived? Given the kinds of orientation information available from early visual processing and the greater accuracy of judgments about orientation than those about absolute depth, he inferred that the 2 ½-D sketch included only a representation of surface orientation (Marr 1982, 282–83). Although Kant’s theory was very likely wrong, and Marr’s was somewhat speculative, my point is only that both modern philosophers and contemporary theorists can appeal to behavioral and theoretical considerations to make claims about Imp-P-Contents.

Finally, to make the important notion of Implicit R-Contents more perspicuous, it may be helpful to return to the definition of implicit consciousness provided above (348–49) and to give an example. Earlier I used “representational feature” in a way that did not distinguish between presentational and referential contents. To understand Imp-R-Consciousness, we need only substitute the case of “R-Content” for the generic “representational feature” and add a bit of clarification. Subjects would be implicitly or obscurely conscious of R-Content C just in case (1) the subject’s representing C [in some way] is necessary for the production of some explicitly conscious representation or for the performance of some other uncontroversial cognitive task, and (2) just on the basis of representing R-Content C, he could not affirm a publicly available, tolerably accurate representation of C that differentiated it from a relevant background. To see how this might be possible, consider some psychological results reported by Eckhard Hess. It turns out that one of the unsuspected factors in assessing faces is pupil size. Although subjects report not noticing differences in pupil size when asked, their responses to sequences of faces as “soft,” “open,” or “gentle” versus “hard,” “selfish,” or “evasive” are partly a function of the large or small pupil size; subjects also choose to work with people with dilated as opposed to constricted pupils

(Hess 1975, 110, 112). To explain these results, we must assume that the subjects do represent pupil size—in some way or other—despite their denials; that is, they must be implicitly conscious of that R-Content. An Imp-R-Content C might be represented by an explicit P-Content D. By Descartes's account, this was the case with "coldness": subjects represented the privation "coldness" as a positive, reportable quality. But it is also possible for subjects to be obscurely conscious of both R-Content C and the P-Content, D, through which they represent C. Drawing on additional studies showing that pupil dilation is an indication of interest, including sexual interest, Hess offered a simple hypothesis for the differing assessments of faces. Large pupil size gives rise to positive assessments, because it is interpreted as an indicator of sexual interest. Again, however, there is no reason to think that the subjects were explicitly conscious of such interest. Translating Hess's account into my terminology, the positive assessments of faces would be explained by inferring that the subjects were implicitly conscious of the R-Content, pupil size, and implicitly conscious of the P-Content, sexual responsiveness, because they represented or registered pupil size as sexual responsiveness.⁷

Kant on the Objects of Representation

Like Descartes and Locke, Kant distinguished between what is represented in consciousness and the way that object is presented. His reliance on this distinction is clear from key texts. He clarified the results of the Transcendental Aesthetic as follows:

We have thus wanted to say: that *the things that we intuit* are not in themselves *what we intuit them to be*, further *their relations* as they are

⁷For completeness, I will spell out the earlier account of implicit consciousness for P-contents: subjects would be implicitly or obscurely conscious of P-Content D just in case (1) the subject's representing in a D-way is necessary for the production of some explicitly conscious representation or for the performance of some other uncontroversial cognitive task, and (2) just on the basis of representing in a D-way, he could not affirm a publicly available, tolerably accurate representation of D that differentiated it from a relevant background. In the example described in the text, given that the positive assessments tracked sexual preferences, theorists inferred that pupil size must be represented in a particular way, namely in a way that would plausibly lead to greater sexual interest on the part of the viewer.

constituted in themselves *are not as they appear to us*. (A 42 / B 59, my emphasis; see also *Inaugural Dissertation*, Walford and Meerbote 1992, 384–85)

Consider also the A edition account of the phenomenal-noumenal distinction itself:

the concept of appearance, as limited by the Transcendental Aesthetic, already itself yields the objective reality of Noumena. . . . For if the senses represent *something* only as it **appears**, so must this something also be in itself a thing. (A 249, my italics)

Again, it is hard to see how to make sense of these central claims of Transcendental Idealism without imputing to Kant some distinction between what we referentially represent and the ways those things are presented in consciousness.

At this point, a familiar suspicion arises. Given the strictures of Kant's epistemology, can he legitimately appeal to notions such as "that which we intuit" or "what appears to us as phenomenon"?⁸ I cannot address this enormous issue here; elsewhere I try to argue that the story of transcendental epistemology can be told without transgressing its own "bounds of sense" (Kitcher 1999). My present concern is exegetical. For better or for worse, Kant clearly appealed to a distinction between what we referentially represent and the ways those items are presented in consciousness.

Kant laid out his views on the relation between representations and their objects in a straightforward and important passage:

There are only two possible cases in which synthetic representation and its object come together, relate to each other in a necessary fashion, and, as it were meet each other: *Either if the object alone makes the representation possible, or if the representation alone makes the object possible*. If it is the first, then this relation is only empirical, and the representation is never possible *a priori*. And this is the case with appearance in respect of that in it which belongs to sensation. (A 92 / B 124–25, my emphasis)

Kant offered no defense of the "first way." He simply assumed that

⁸As Strawson (1966) argues, the problem of secondary qualities arises only in the context of a "corrected view." But since everything knowable falls on the phenomenal side of the phenomenal-noumenal distinction, it appears that Kant has no room for the notion of a "corrected view" and so cannot coherently suggest that the objects that appear might not be as they appear to be. In Kitcher (1999), I defend transcendental epistemology against Strawson's charge of incoherence.

a representation could relate to an object, could be a representation of an object, if that object made the representation possible, presumably by causing it.⁹

Kant's assumption that demonstrating a causal connection from an object to a representation was the obvious way to establish a representation relation between the representation and the object is even clearer in a famous letter to Marcus Herz where he posed the key question for his theoretical philosophy:

I asked myself: On what ground rests the relation of that in us which one calls representation to the object? If a representation includes only the way in which the subject is affected [*afficirt*] by the object, then it is easy to see how the representation is in conformity [*gemäss*] with this object, as an effect with its cause, and how this modification [*Bestimmung*] of our mind can represent something, that is, have an object. (Ak. 10:130)

I take Kant's point to be that insofar as something is the sole cause of an effect, then the features of the effect must correspond to features of the cause. This correspondence or "conformity" need not amount to resemblance. My shadow does not resemble me, but on pain of violating the *ex nihilo* principle, if I am its sole cause, then each of its contours must correspond to some feature of me. Despite this inevitable correspondence, however, a representation can still present an R-Content as other than it is, because the "pure" case—considered both in the letter and in the passage from the *Critique*—is an idealization. As we will see below, Kant believed that all our representations reflect both the objects that give rise to them and the actions of our own representational powers.¹⁰ For this reason, some aspects of a representation that is partially caused by an object might present that object as other than it is. Further, despite the inevitable correspondence between features and R-Contents, subjects can be mistaken about the causes of different features of their representations and so about the R-

⁹Kant also raised the question of how we can understand "an object of representation" at A 104. There his concern was with his revolutionary claim that representations could also relate to objects in a second way, if they made the objects possible [as objects of cognition]. When I discussed objects of representation in my 1990 (70–73), I was concerned with the second way.

¹⁰At A 294 / B 350, Kant notes that no natural power can lead to error on its own; error requires the operation of several distinct processes.

Contents of their own representations. Kant's early *Dreams of a Spirit-Seer* includes a revealing discussion of how this possibility might arise. In the course of trying to explain how seers project their own imaginings onto an outer source, he suggested an analogy with the perception of external objects. Then he offered an hypothesis about how we represent objects as external: we "include the locale of [objects] in our sensations . . . [as follows:] it is very probable that our soul, in its representation, displaces the object of sensation to where the various lines, which indicate the direction of the impression and which are caused by the object, intersect, when they are extended" (Ak. 2:344). Thus, although people's representations of the spatial locations of objects are produced by their own souls, their representations present objects as arrayed in space and they mistakenly trace their representations of spatial position to the objects.

From all these passages, it is clear that Kant made a distinction between P-Contents and R-Contents, and that he regarded it as uncontroversial that the relation of representations to their R-Contents was grounded in their causal relations. He must have had some inkling that the many causes of representations could raise problems for this position, because he understood the complexities of visual perception as well as Locke did. Much current work in philosophy of language and mind has been devoted to refining causal accounts of reference in some way that avoids the "too many causes of representations" problem (see, for example, Dretske 1981, Millikan 1984). As will be clear from texts cited below, Kant did not try to solve the general problem of too many causes of representations. On the other hand, as an anti-Nativist defender of the possibility of *a priori* knowledge, he had to draw some crucial distinctions among the causes of representations.

A Priori and A Posteriori Representations

The importance of distinguishing among the causes of representations for Kant's philosophy is clear from the fact that he drew these distinctions immediately, in the opening paragraphs of the Introduction.

There is no doubt that all our cognition begins with experience; for through what else should the cognitive faculty be awakened into exercise if not through objects that stir our senses and partly by them-

selves produce representations, partly bring our understanding's activity into motion. . . .

But even though all our cognition commences **with** experience, nevertheless, it does not for that reason all originate **from** experience. For it might well be that our empirical cognition itself is a composite of what we receive through impressions and of what our own cognitive faculties give up out of themselves (merely induced by sensory impressions). . . . (B 1)

Sensory objects ("objects that stir our senses") must begin the process of forming representations. Further, like most Empiricists, Kant believed that sensory objects cause some of the presentational contents of representations. But he held out the possibility that sensory stimulation might be insufficient to explain all the contents of "empirical" representations: "empirical" cognition might be a composite of what our cognitive faculties "added to" the "fundamental materials" [*Grundstoffe*] produced by sensory objects (B 2).

Although we could speak of the "many" causes of (whole) representations in Kant's theory, his own term "composite" [*Zusammengesetzt*] is more illuminating. He did not distinguish among the causes in the chain leading to the production of sensory impressions; he just bluntly fastened on sensory objects. On the other hand, he was very concerned to allow for the possibility that empirical representations were a conjoint product of two different causal processes—the chain that produced sensory impressions and the "workings of our minds."¹¹ He did not cast the issue in terms of the many causes of representations, but divided the elements of representations on the basis of their causes: *a posteriori* representations "are those that have their sources *a posteriori*," namely in stimulation by external sensory objects; by contrast, "*a priori* cognitions" are those that do not have their sources in sensory impressions, but in the workings of the mind.¹² Since he believed that the sole option for establishing synthetic *a priori* knowledge was to demonstrate that "empirical" cognition was composed of elements produced by these two different sources, he spent the rest of the *Critique* exploring this possibility.

Although Kant had no reason to sort out the many causes of

¹¹I borrow this expression from Easton 1997.

¹²Commentators usually focus on Kant's subsequent presentation of the tests for *a priori* cognition, namely necessity and universality. But at B1, he introduced the notion of *a priori* cognition in terms of its distinctive cause.

sensory impressions, he could advance his defense of *a priori* knowledge only if he had some way (or ways) of distinguishing between *a priori* and *a posteriori* representational elements, or between contents produced by sensory objects external to the mind and contents produced by the inner workings of the mind. We will consider these ways in more detail below. For the moment, let us assume he had some such ways. Recall that he regarded it as obvious that the way to determine the R-Contents of representations was by appeal to their causes. Of course, the problem of “many causes” raises questions about the viability of a causal theory of the R-Contents of representations; but I take the continuing efforts to resolve this problem as evidence that Kant (and other moderns) were right in regarding a causal account as the most promising approach. Thus, if he had some way of showing that particular representational elements originated in the workings of the mind, then, by the standards of his day and our own, he would also have had good reasons for claiming that, in being conscious of these P-Contents, subjects were (implicitly) conscious of particular R-Contents, the workings of their own minds.

In the Introduction, Kant was somewhat cagey about how the “additions” produced by the workings of our minds were to be distinguished from materials received through sensory impressions. The different contents could be sorted out only through “long practice” (B 2). In fact, he needed to do little sorting himself. The Empiricists had spent considerable effort revealing that various aspects of our ideas could not be understood as the effects of sensory impressions. But showing that a particular representational content was not caused by an external object affecting the senses would not enable Kant to conclude that it was “*a priori*,” in the sense of “caused by the inner workings of the mind.” He needed two additional moves. In an interesting passage, he presented what he took to be the exclusive and exhaustive alternatives for causes of representations: “Wherever our representations may originate, whether through the influence of external things or through the effect of inner causes, whether they have arisen *a priori* or empirically . . .” (A 98).¹³ That is, any representation is produced *either*

¹³This passage is one place where the new translation of Guyer and Wood is notably superior to the standard Kemp Smith translation. By rendering this passage “Whatever the origin of our representations, whether they are due to the influence of outer things, or are produced through

by objects *or* by the mind. Followers of Berkeley or Malebranche might have felt slighted, but he made no efforts to argue against more fanciful theories of the origins of representations in the *Critique* (but see Ak. 4:282). If external sensory objects and inner causes were the only serious candidates for causes of representations, and if the Empiricists had shown that a representational element could not be traced to sensory impressions, then Kant could conclude that the element was *a priori*—if he could differentiate the workings of the mind (by which he meant the regular operation of its faculties) from other inner causes. We will consider how he made this second move when we look at specific cases in section 3.

Before turning to Kant's claims about cognition, it will be useful to summarize the conclusions of this section. Since he both accepted obscure representations and distinguished between the presentational and referential aspects of representations, all four cells of the table given above were available to him as options for understanding "consciousness." The two right-hand cells offer the most plausible options for the kind of consciousness he had in mind, because he often indicated that the Self-Consciousness involved in cognition was obscure. Given his views that R-Contents were determined by causal relations and given the centrality of the project of establishing that certain representational elements were produced by the workings of the mind, one obvious interpretive hypothesis is that he thought that subjects were Self-Conscious in being implicitly conscious of the R-Contents, the workings of their minds. In the next section, I will show how this interpretive hypothesis makes sense of some of Kant's most puzzling claims and arguments. By looking at the details of those arguments we will also be in a position to determine how—and how well—he was able to resolve some outstanding problems. How was he able to show that certain P-Contents were produced by the workings of the mind, as opposed to sensory objects or other inner causes? How plausible is his implicit assumption that the actions of cognitive faculties can be understood as "the" cause of various P-Contents?

inner causes . . .," Kemp Smith misleadingly suggests that the issue is skepticism and not the two sources of representations.

3. Cognition and Self-Consciousness

Claims for the necessity of “apperception” or “Self-Consciousness” are ubiquitous in the Transcendental Deduction. But Kant provides tolerably detailed arguments in connection with only two cognitive tasks: A 104 explains the necessity of Self-Consciousness for recognition in a concept (see also the recapitulation at A 115); B 141–42 argues for the necessity of Self-Consciousness in making objective judgments. To unpack these exceptionally dense discussions, I will adopt an indirect strategy. It is easier to understand exactly how Self-Consciousness fits into Kant’s theories of concept application and judgment by starting with his more detailed account of intuition. Kant did not claim that intuition required Self-Consciousness. As I will argue, however, on his theory, intuiting involves something very like Self-Consciousness, because it involves a consciousness or awareness of the necessary activities for producing spatial representations.¹⁴

Spatial Intuitions

The necessity of spatial and temporal intuitions for cognition is widely recognized as a central Kantian doctrine. Like many others, I limit my considerations to space. To answer his hallmark question of how cognition was possible, Kant had to consider how spatial intuitions were possible. In the text, the question emerged in a slightly different form. After explaining that “[b]y means of outer sense, a *property of our minds*, we represent objects *as* outside us and in space” (A 22 / B 37, my emphasis), he asked: “what now [is] . . . space?” (A 23 / B 37). That is: what are the things or properties or relations *that we represent as space?*

There is also widespread interpretive agreement about Kant’s negative and positive answers to the question of what thing or property or relation we represent via our spatial intuitions:

[The representation] space represents absolutely no quality of any objects themselves, and no relation among objects; that is, no determination of objects that attaches to objects themselves and which remains if we abstract from the subjective conditions of intuition.

¹⁴For a resourceful defense of the opposing view, that Kant did not maintain that spatial representations were constructed, see Falkenstein 1995, chaps. 1 and 2.

Space is nothing but the form of all appearance of outer sense, i.e. s, the *subjective condition of sensibility through which alone outer intuition is possible*. (A 26 / B 42, my emphasis)

Despite long familiarity, these claims are still shocking. Both lay people and theorists have consistently been wrong about what they were conscious of in having spatial representations. They believed that these representations were representations of a property or relation of external objects.

But what of the positive doctrine? What did Kant mean by the claim that space was nothing but the form of intuition? At this point, the well-known ambiguity of 'form of intuition' surfaces. As many commentators have observed (for example, Allison 1983, 97), Kant used 'form of intuition' in two different ways. In some texts 'form of intuition' clearly refers to the spatial aspects of intuitions; in others, it clearly refers to the mental faculty or processes that he believed produced those aspects; in still other texts, the usage is unclear. I will use '[product] form of intuitions' for the first sense and '[process] form of intuition' for the second. The [product] form of intuition involved the way in which things were represented, as standing in determinate relations in Euclidean space. In the terminology introduced above, the [product] form of intuition would be part of the Exp-P-Content of spatial representations. By itself, the dramatic claim that "space is nothing but the form of . . . outer sense" could be understood as making a claim about the [product] form of intuition: spatial representations are nothing over and above their P-Contents; they lack R-Content. But the clause that comes after the 'i.e.' clearly refers to [process] forms. Hence I think the correct way to read his positive doctrine—"Space is nothing but . . . the *subjective condition of sensibility through which alone outer intuition is possible*"—is as the claim that what space, that is, what that which we represent as space, is, is something; the representation of Euclidean space has the unsuspected Imp-R-Content, the [process] form of intuition.

This reading is confirmed by Kant's frequent denials that spatial [and temporal] properties were mere illusions (for example, B 69). Instead, he explained that "the form of intuition, since it represents nothing except insofar as something is put [*Setzen*] in the mind, can be nothing *other than the way in which the mind is affected [afficirt] by its own activity*" (B 67–68, my emphasis). Kant's choice of words seems significant. Recall a key passage in his letter to

Herz: “If a representation includes only the way in which the subject is affected [*afficirt*] by the object, then it is easy to see how . . . this modification of our mind can *represent* something, that is, have an object” (Ak. 10:130; discussed at 356, above). Because Kant’s usage of ‘form of intuition’ blurred the distinction between the product and process ways of understanding ‘form’, B 67–68 is difficult to parse. Still, given the view in the letter to Herz, a view that he reiterated in less detail at A 92 / B 124, I think that Kant’s claim is best understood as follows: When a representation is put in the mind, certain P-Contents, some spatial aspects of that representation (the [product] form of intuition), represent nothing but the activity of the [process] form of intuition, because those P-Contents are the way in which the subject is affected by the activity of its own [process] form of intuition upon the presentation of sensory objects.

In light of the difficulties for causal theories of R-Contents noted above, we need to consider whether Kant had any means of justifying this claim. How could he maintain that some spatial aspects of representations were caused by the workings of the mind itself, specifically, by the faculty of intuition? Start with his reasonable assumption that the P-Contents of representations must be caused by either external sensory objects or inner causes. Before offering his positive conclusion at A 26 / B 42, he reminded his readers that the first option had been ruled out. Without repeating arguments given elsewhere (Kitcher 1987), I will simply state the relevant conclusion. Kant had no need to demonstrate that some spatial aspects of representations—in particular, the place of external objects at a distance from the observer—could not be traced back to sensory objects; his predecessors had already shown this by appealing to the geometry of vision.

It follows that the [product] form of intuition has some inner cause. What further grounds would allow him to fasten on a particular inner cause, the [process] form of intuition? To understand Kant’s reasoning here, and in the parallel parts of the arguments about concepts and judgments, we need briefly to consider his theories of mental faculties. These follow, in part, from his views about causal reasoning and about the systematizing tendencies of reason (which he took faculty theories to exemplify (A 649 / B 677)). Causal reasoning requires regularity, and he was explicit that the forms of intuition were “constant” (A 27 / B 43), meaning that

they did not vary across time or individuals. Presumably his evidence was the common observation that people regularly form similar spatial representations upon the presentation of sensory objects. Given that some aspects of these representations could not be traced to the objects, he reasonably attributed their causation to some constant cause within subjects. Why characterize that cause as *the faculty of intuition*?

Like his predecessors and successors, Kant divided the mind into different faculties on the basis of the similarities and differences across different cognitive activities. Seeing objects was *prima facie* different from imaging them, from forming concepts of them, and from making inferences; despite the differences involved in seeing different objects, these activities were similar in many respects. Applying his own sensible principles of systematicity (namely, homogeneity and specificity), he could and did infer from this variety of cognitive accomplishment to a variety of faculties, including intuition, imagination, understanding, and reason. Hence spatial representations were caused by a faculty of *intuition*. But how could he assert that one faculty of intuition was *the cause* of the [product] form of intuition, and hence the R-Content of these P-Contents? The short answer is that Kant was a “functionalist.” As Charles Bonnet explained in the opening sentence of his *Essai de Psychologie*, eighteenth-century theorists had little choice but to be functionalists: “We know the soul only through its faculties; we know these faculties only by their effects” ([1755] 1978, 1.) Kant described the [process] form of intuition as *the cause* of the [product] form of intuition, because what he meant by ‘the [process] form of intuition’ was ‘the faculty that produces the [product] form of intuition’.

Given Kant’s understanding of faculties, there was an important—and perhaps ultimately disturbing—asymmetry between what he regarded as the two different causal processes that conjointly produced representations. The problem of many causes could arise on the sensory object side, because much was known about the chain of causes leading to sensory impressions. It did not arise on the mental side, because nothing was known about how the mind’s actions might produce representational elements.¹⁵ To put it even

¹⁵The importance of this asymmetry to Kant’s position emerged in a discussion with Philip Kitcher.

more bluntly, Kant could avoid the “too many causes” objection to causal theories of R-Contents, not because he had some way of deciding among various contenders, but because his claim about the “[process] form of intuition” was nowhere near as specific as various available claims about “the” cause of sensory impressions.

How we ultimately evaluate Kant’s argument that spatial intuition requires the [process] form of intuition (and the arguments about concepts and judgments to come) depends on two large issues that I will raise, but cannot hope to settle. Consider three obvious criticisms. Even if Kant’s functionalism allowed him to claim safely, if not very informatively, that the [product] forms of intuition represented nothing but the activity of the [process] forms of intuition, that approach was vulnerable to the march of science, and his arguments have collapsed in the face of current knowledge. Now we have a competing cause for the spatial form of intuition: either the whole brain or parts of the hippocampus (O’Keefe and Nadel 1978). Alternatively, future science might discover a host of more fine-grained psychological faculties or more specific physiological mechanisms, thus revealing a chain of inner covarying causes similar to that involved in the causation of sensory impressions. In that case, a causal theory of R-Contents would be just as problematic for inner as for outer causes of representations. Finally, some might object that even at the time Kant was writing the *Critique*, he could not reasonably fasten on the [process] form of intuition as the cause, and so the R-Content, of spatial representations. What the asymmetry between the inner and outer causes of representations reveals is what some have long suspected: functionalism allows ignorance to masquerade as knowledge (Churchland 1986, chap. 9).

Fully to support Kant’s arguments, it would be necessary to defend the probity of functionalist descriptions, thus turning back the third criticism and opening up a line of reply to the first. If functional descriptions are legitimate, then one might reasonably argue that hippocampal activity is not a competitor for the [process] form of intuition, but the way in which the [process] form of intuition is physically realized. Again, if functionalism is a legitimate approach to characterizing the mental, then the best way to understand spatial perception *might* be in terms of a broad faculty for determining spatial position that encompasses a long line of sub-faculties or particular neurophysiological transformations, thus

providing a means of dealing with the possibility of a chain of causes envisioned by the second criticism. Since this last result can hardly be assumed, however, a complete defense would also require a general or applicable solution to the too many causes problem for causal theories of R-Contents.

I can neither offer, nor appeal to, a compelling defense of functionalism or a satisfactory version of the causal theory of reference. So my claims for this Kantian argument, and for those given below, are not that they are irresistible, but only that they are reasonable. Given the continuing debates about functionalism, this approach must be acknowledged to be both attractive and *prima facie* defensible. As I noted above, given the continuing appeal of causal theories of R-Contents, Kant's assumption that such theories were intuitively obvious is also plausible. But, if functionalism is granted, then it was also reasonable for him to believe that he could isolate the cause of spatial aspects of representations by ruling out sensory objects and by dividing the capacities of the mind, in light of their similarities and differences, among various faculties. Although he showed no signs of appreciating the difficulties attending causal theories of R-Contents, the continuing efforts to resolve these problems imply that the approach has not been rejected as hopeless (for example, Godfrey-Smith 1996, chap. 6). So this lapse does not vitiate his arguments. In sum, Kant's arguments were not airtight when he made them and cannot presently be made airtight. Nonetheless, they were reasonable, because what they depended upon, the plausibility of functionalism¹⁶ and of causal approaches to R-Contents, were and are eminently sensible assumptions.

I take Kant's reasonable argument to be twofold: spatial intuitions and hence also cognition are possible, because needed elements of spatial representations are produced by the [process] form of intuition upon the presentation of sensory objects; in having spatial intuitions, subjects must be implicitly conscious of the activities of their own [process] forms of intuition. Using the distinctions and interpretations offered above, the steps in this argument can be made precise and explicit:

¹⁶Functionalists often invoke Kantian epistemology and ethics to defend their approach. The fact that some of his central arguments assume the probity of functionalism is compatible with this use, so long as functionalists appeal to the virtues of *other* aspects of his views.

- S1. All cognition requires spatial intuitions. [Transcendental Aesthetic]
- S2. In particular, to have cognition, subjects must be conscious of certain P-Contents, the properties of three-dimensional Euclidean space. [Transcendental Aesthetic]
- S3. Any representation is produced *either* by objects *or* by the mind. [A 98]
- S4. At least some P-Contents of spatial intuitions, the [product] form of intuition, cannot be traced to the effects of sensory objects. [Kant's predecessors on the science of vision]
- S5. By standard principles of causal reasoning, including the principles of homogeneity and difference, the [product] form of intuition should be understood as the way in which the mind is affected by the [process] form of intuition. [S3, S4]
- S6. If a representation includes only the way in which the subject is affected by the object, then this modification of the subject's mind represents something, namely, that object. [Given its origin, I will refer to this principle as the "LH" (for "letter to Herz") principle for determining R-Contents.]
- S7. Therefore, when we are conscious of certain P-Contents, the [product] form of intuition, we are Imp-R-Conscious of are our own intuiting activities, the [process] forms of intuition. [S5, S6]
- S8. Therefore, all cognition must involve an Imp-R-Consciousness of our own intuiting activities. [S1, S2, S7]

Only two additional premises would be required to draw the desired conclusion about cognition and Self-Consciousness:

- *S9. Along with sensory data, our intuiting activities suffice to yield cognition and so to make us cognitive selves.
- *S10. Therefore, in being Imp-R-Conscious of our own intuiting activities, we are obscurely conscious of those activities that make us a cognitive self. [*S9]
- *S11. In being conscious of the activities that permit cognition and so make us cognitive selves, we are implicitly Self-Conscious.

*S12. Therefore all cognition must involve Imp-R-Self-Consciousness. [S8, *S10, *S11]

But for the case of intuition, these premises cannot be had. Premise *S9 contradicts Kant's dictum that cognition requires concepts (which find use only in judgments). Premise *S11 needs further explication and defense, which will be offered in section 4. Nevertheless, this argument displays most of the key elements in Kant's understanding of the relation between cognition and Self-Consciousness: cognition requires consciousness of certain necessary elements that cannot be produced by the senses, but only by our cognitive faculties; hence, in being conscious of those elements, we are obscurely conscious of our cognitive activities in response to sensory data.

To fill in the gaps, we need to consider the additional cognitive tasks required for cognition and whether those tasks also require consciousness of elements that are produced by the mind's own activities. Given Kant's epistemology, it is fairly clear what those further tasks must be—namely, recognizing in a concept and judging. Presumably that is why the Deduction's sweeping claims about the necessity of Self-Consciousness in cognition are anchored to the analyses of these tasks.

Useful, Unified Concepts

Kant maintained that cognition required classification under concepts (A 106), which, in turn, required consciousness:

If, in counting, I forget that the units that now float [*schweben*] before my senses were added together by me one after another, I should never know that a total is being produced through this successive addition of unit to unit, and so would remain ignorant of the number; *for the concept of number consists exclusively in the consciousness of this unity of the synthesis.* (A 103, my italics)

... it is this **one** consciousness that unites the successively intuited multiplicity in one representation. *This consciousness may often be weak, so that we connect it with the production of the representation only in the effect, and not in the act itself, i.e. directly;* but regardless of these differences, a consciousness must always be met with, even if it lacks striking clarity, and without this all concepts and with them cognition of objects is entirely impossible. (A 103–4, my italics)

These passages include many claims that I will not even address;

further, I won't defend several of the claims I do consider. My aim is only to demonstrate how the considerations about intuition just presented can clarify a central strand of Kant's complex account of cognition.

To begin to understand the *prima facie* bizarre first claim that I underscore—that a necessary condition and sufficient condition for having a concept such as number is the consciousness of a certain unity—we need to consider Kant's general views about concepts. The purpose of recognizing objects in concepts was to unify knowledge by indicating important similarities and differences among objects. So, for example, classifying an animal as a “dog” was not simply a matter of giving it a name; to contribute to cognition, classification must permit further cognitive moves, such as inferring that the animal had four legs, was closely related to wolves, less closely related to bears, and so forth.

But Kant believed that applying a concept allowed further cognitive moves only under two conditions: concepts were associated with clusters of characteristics and the interrelations among them, and subjects were conscious of these [unified] clusters. That is, he reasoned that bringing an object under a concept would permit the unification of knowledge only if in representing *x* as an *F*, subjects were conscious of various conceptual elements in *F*, in the sense that they could make some inferences and have some sense of the similarities between *x* and other *F*s and of the differences between *x* and non-*F*s (Ak. 9:58; Young 1992, 565). Hence, he believed that concepts had other concepts as “marks,” and that subjects must be at least obscurely conscious of those marks and the interrelations among them (B 414–15a). In my terminology, his view was that because subjects were conscious of certain Exp-P-Contents, “dog,” and could infer to such other Exp-P-Contents as “possesses four legs,” then we must assume that they were also conscious of an Imp-P-Content that presented “possesses four legs” as one of the marks of “dog.” The unification of various marks in a concept was the unity of a concept (B 114–15).

The unity of concepts bears on the relation between cognition and Self-Consciousness, because Kant believed that this unity must involve relations of genus and species among the marks. In the Dialectic, he argued that this genus-species structure of our system of concepts (and of individual concepts (Ak. 9:95–101)) must be a product of the “real use” of the faculty of reason, as it sought

systematically related concepts according to ideas of homogeneity, specificity, and continuity (A 657–58 / B 685–86). It could not be traced to the multiplicity of properties and powers encountered in the natural objects actually presented to our senses. Hundreds of pages earlier (A 77 / B 102–3), he had maintained that in addition to sensibility, the mind had a “spontaneous” faculty that combined or “synthesized” representations in ways that did not simply replicate sensory data in the order and frequency received. Only when he had shown that some elements of the structure of unified concepts could not be traced back to the senses was he (finally) justified in claiming that concepts were produced by a “spontaneous” “synthesis” and in describing the unity of a concept as a “synthetic” unity (for example, A 106, A 103.)

Kant attributed the spontaneous activity of producing concepts both to the understanding and to reason.¹⁷ For his central purpose of establishing necessary *a priori* elements in cognition, it did not matter where the necessary synthetic activity in creating concepts was located. As we have seen in the case of the form of intuition, however, his argument that certain *a priori* P-Contents could be traced to some one cognitive faculty can be made compelling only by future developments. In this case, it would be the determination that some aspects of concept creation are best understood in terms as the product of one broad faculty. So, again, my claim is only that his positing of a spontaneous concept-creating faculty was reasonable. The posit is defensible, because his assumptions about functionalism and the causal approach to R-Contents were sensible, and because he had good reasons for claiming that the genus-species structure of concepts could not be extracted from sensory data (Kitcher 1991).

With some understanding of Kant’s views about the structure and origins of concepts, we may return to the passage cited above and its seemingly odd claims. In maintaining that the necessary

¹⁷When Kant first introduced the spontaneous activity of synthesis, he characterized it as the distinctive activity of a faculty he labeled “understanding.” And in places, he suggested that all empirical concepts were specifications of one or more of the categorial concepts (A 111–12 / B 152, B 160–61), which were also presented as the distinctive products of a faculty of “understanding.” Yet in the *Dialectic* he maintained that reason “prepared the field for the understanding” by enabling subjects to form concepts whose marks were related as genus and species (A 657 / B 685).

and sufficient condition for subjects' having a concept was that they be conscious of "this unity of synthesis" he understood this phrase to mean at least "the synthetic unity of the concept." In his view, such explicit or implicit consciousness of the structure of their concepts was necessary to explain the ability of subjects to use the concept. Perhaps he also intended the phrase 'this unity of synthesis' to refer to the activity of producing the synthetic unity of concepts. In that case, he would be claiming that it was necessary and sufficient for concept use that subjects be conscious of *both* the product and the process of synthesis. In the second italicized clause (368), the second claim is made more explicitly: in applying concepts, subjects were weakly or obscurely conscious of their own acts or activities.

Despite its initial strangeness, this claim follows directly from the two doctrines just considered, that subjects must be conscious of the synthetic unities of concepts and that the unities of concepts involve contributions from a spontaneous faculty of concept formation, plus some reasonably obvious assumptions and the principles we have already considered. Kant maintained that in concept use, subjects must be conscious of the ordered elements in their concepts; he argued that at least some aspects of these orderings could not be derived from objects themselves. He also believed that the formation of concepts with genus-species structure must be constant across people and times and that concept formation differed in obvious ways from such activities as seeing and imagining. By his principles of causal reasoning and systematicity, he concluded that these P-Contents, genus-species structure, must be produced by a faculty that creates concepts; by the LH principle, he concluded further that in being conscious of the synthetic unities of their concepts, subjects were conscious of the R-Contents, the synthetic activities of their own concept-creating faculty.

To summarize Kant's view: Concept use requires at least an implicit consciousness of the unity of concepts, but some elements of that unity do not come from the senses; rather they derive from and so represent our cognitive activities. He expressed the latter point with great clarity in his handwritten logic notes: "Transcendental notions [that is, non-empirical contents that are nonetheless necessary for cognition]¹⁸ do not represent (*vorstellen*) things, but

¹⁸See note 2.

the acts of understanding itself, [that] make synthetic concepts of things” (Ak. 16:548, Nr. 2857). Using the forms of intuition model, we can understand exactly how he linked recognition in a concept—applying concepts to objects—to Self-Consciousness:

- C1. All cognition requires useful, unified concepts. [Transcendental Analytic]
- C2. In order to recognize objects in concepts, subjects must be explicitly or implicitly conscious of a certain P-Content, the synthetic unity of the concept, which includes a genus-species structure. [His theory of the implicit consciousness required to explain concept use, plus arguments of the Dialectic]
- C3. Any representation is produced *either* by objects *or* by the mind. [A 98]
- C4. The genus-species structure of concepts cannot be traced to the effects of sensory objects. [Arguments of the Dialectic]
- C5. By standard principles of causal reasoning, including the principles of homogeneity and difference, the genus-species structure of the synthetic unity of concepts should be understood as the product of a faculty for creating concepts. [C3, C4]
- C6. If a representation includes only the way in which the subject is affected by the object, then this modification of the subject’s mind represents something, namely, that object. [The LH principle for determining R-Contents]
- C7. Therefore, when we recognize objects in concepts, what we are conscious of (in part) are the Imp-R-Contents, our own synthesizing activities. [C5, C6]
- C8. Therefore, all cognition must involve an Imp-R-Consciousness of our own synthesizing activities. [C1, C2, C7]
- *C9. Along with sensory data and intuitions, our synthesizing activities in producing concepts suffice to yield cognition and so to make us cognitive selves.
- *C10. Therefore, in being Imp-R-Conscious of our own synthesizing activities, we are obscurely conscious of those activities that make us a self. [*C9]
- *C11. In being obscurely conscious of the activities that are nec-

essary for cognition and so make us cognitive selves, we are obscurely Self-Conscious.

*C12. Therefore, all cognition must involve Imp-R-Self-Consciousness. [C8,*C10, *C11]

As noted above (368), Kant understood the possession of concepts in terms of the ability to use them in judgments: “the understanding can make no use of concepts other than judging by their means” (A 68 / B 93). Hence, for all its complexity, his account of concept application at A 103–4 is incomplete. It needs to be supplemented by an account of judgment. Further, it is also widely agreed that Kant believed that cognition required the ability to make “objective” judgments about intersubjectively available objects and events (Ak. 4:297; Strawson 1966, 100–110). He would reject *C9, because, along with consciousness of the synthetic unity of concepts (C2), recognition in a concept (as well as cognition more generally) also requires the ability to make judgments. So, although we are closer to his complete account of the necessary conditions for cognition—and so closer to an account of the necessity of Self-Consciousness in cognition—we are not yet there. Kant’s theory of judgment is typically complex, but my discussion will be brief. Again, I will only try to show how the foregoing model can illuminate the relation he claimed between judging and Self-Consciousness.

Objective Judgments

Kant linked Self-Consciousness to judging in a difficult passage in the second edition.

I find that a judgment is nothing but the manner in which given cognitions are brought to the objective unity of apperception [Self-Consciousness] . . . for, example, in the judgment, ‘Bodies are heavy’. I do not here assert that these representations *necessarily* belong to one another in the empirical intuition, but that they belong to one another in *virtue of the necessary unity* of apperception [Self-Consciousness] in the synthesis of intuitions, that is, according to principles of the objective determination of all representations, . . . principles which are derived from the fundamental principle of the transcendental unity of apperception [Self-Consciousness]. (B 141–42)

(I interpolate ‘Self-Consciousness’ for ‘apperception’, because

Kant was using these terms interchangeably at this point.)¹⁹ His *explanandum* was the ability of subjects to distinguish objective and subjective representations, their ability to distinguish how things were from how they seemed to the subject. How could a subject determine that a body was heavy as opposed to his merely associating the idea of weight with it?

Kant's contention was that subjects accepted representations as the basis for objective judgments just in case they could be fitted into their existing beliefs in a particular way: they were consistent with (or extended or coherently revised) their beliefs about the basic constituents of reality and their causal interrelations. Bringing a representation to the "objective unity of self-consciousness" would be a matter of determining its coherence with existing beliefs along the categorial dimensions of substance and cause, that is, "according to the principle of the objective determination of all representations."²⁰ Suppose I see what appears to be a ship moving downstream. How do I judge that a ship is, in fact, changing its location? Kant's claim, which in this instance was spelled out more clearly in the *Prolegomena* than in the *Critique*, was that the mind checked for the coherence of this representation with the categorial principles, with the data of sense, and with both simultaneously (Ak. 4:307–8). He did not speculate on how exactly the mind determined coherence. His point was limited to a claim—albeit a very strong one—about necessary conditions. Subjects can differentiate objective from subjective representations only by appealing to their explicit or (more usually) implicit causal and substantival beliefs. In the present case, they might draw on the beliefs that currents cause things to move and that rivers have currents.²¹

Kant accepted the arguments of his Empiricist predecessors that the relations of causal connection and of "substance as bearer of

¹⁹The preceding paragraph is entitled "What the Objective Unity of Self-Consciousness Is," yet begins, "The transcendental unity of apperception is . . ." (B 139).

²⁰As do many other interpreters, I take substance and cause to be the most important categories, but none of the points I make would alter by considering a wider range of categories.

²¹Guyer (1987, chap. 10) argues persuasively that Kant's argument in the Second Analogy was that subjects could distinguish events from non-events only if they invoked particular causal laws, and not merely a general causal principle.

accidents” could not be extracted from sensory data. Given their necessary role in cognition, the formation of “causal” contents and “substance as bearer of accidents” contents upon presentation of [sufficient]²² sensory evidence must be constant across subjects and across times. He also took the accomplishment of judging to be *prima facie* different from activities such as sensing, imaging, and inferring. Applying his principles of causal reasoning and systematicity, he attributed these activities to a separate faculty. His choice of terminology was unusual. He attributed the formation of the key conceptual contents required for judging to a faculty of “understanding”—hence, his memorable claim that causal, substantial, and other categorial contents “have their birthplace in the understanding itself” (A 65–66 / B 90–91). For reasons we have seen, Kant’s positing of a single faculty of understanding as the source of these contents could be fully vindicated only by future psychological discoveries.

Given the view expressed in the letter to Herz about the obvious way to determine the R-Contents of various P-Contents, Kant inferred that what subjects were conscious of in being explicitly or implicitly conscious of causal and substantial contents were both external objects and properties, and also the activities of their own creative understanding. He was not very explicit in the passage above, although he did maintain that any objective judgment must be brought to the “objective unity of apperception [Self-Consciousness].” I take that claim to mean that we form objective judgments by coherently synthesizing present representations with our existing body of representations, which is a matter of forming or updating beliefs that include causal and substantial contents, which requires an implicit awareness of these “transcendental contents,” and so involves implicit Self-Consciousness, that is, an obscure consciousness of our own creative acts.

In another passage, Kant was explicit, indeed almost dramatic, in linking Self-Consciousness to a consciousness of the spontaneous cognitive activity required for cognition: “I exist as an intelligence, which is conscious solely of its power of combination” (B 158–59). On its face, this pronouncement is extremely puzzling. What is it to be conscious of spontaneity or conscious of a power of combination? Mustn’t the claim really be that subjects are con-

²²See below 379–80.

scious of the *products* of spontaneity? The preceding analysis offers a simple solution: in being explicitly or implicitly conscious of products of their own spontaneity such as causal and substantial contents, subjects were also implicitly conscious of their own creative powers. This was so, he believed, because certain crucial contents of representations were created in the mind by its own powers of combination.

Using the same format as before, we can summarize Kant's account of the relation between judging and Self-Consciousness as follows:

- J1. Cognition is possible only if it is possible to make objective judgments, which express how things are as opposed to how they seem. [Transcendental Analytic]
- J2. In making objective judgments, subjects must draw on, and so be at least implicitly conscious of, causal and substantial contents. [The arguments of the Analogies]
- J3. Any representation is produced *either* by objects *or* by the mind. [A 98]
- J4. Causal and substantial contents cannot be traced to the effects of sensory objects. [Arguments of the Empiricists]
- J5. By standard principles of causal reasoning, including the principles of homogeneity and difference, the causal and substantial contents of beliefs should be understood as the product of an additional faculty, which may be called "understanding." [J3, J4]
- J6. If a representation includes only the way in which the subject is affected by the object, then this modification of the subject's mind represents something, namely, that object. [The LH principle for determining R-Contents]
- J7. Therefore, when we make judgments, we must be explicitly or implicitly P-Conscious of certain causal and substantial contents, and so Imp-R-Conscious of our own activities in combining concepts. [J5, J6]
- J8. Therefore, all cognition must involve an Imp-R-Consciousness of our own activities of combining concepts. [J1, J2, J7]
- J9. Along with sensory data, intuitions, and concepts, our ability to make objective judgments suffices to yield cognition and so to make us cognitive selves.

- J10. Therefore, in being Imp-R-Conscious of our own activities in producing intuitions, synthesizing intuitions in concepts, and combining concepts in judgments, we are obscurely conscious of those activities that make us a self. [J9]
- ?J11. In being Imp-R-Conscious of our intuiting, synthesizing, and combining activities, we are implicitly Self-Conscious.
- ?J12. Therefore, all cognition must involve Imp-R-Self-Consciousness (J8, J10,? J11).

At this point, we have considered Kant's widely acknowledged claims about the necessary conditions for cognition and their relations to Self-Consciousness. Premise J9 reflects the cumulative nature of his expositions. By the time we get to judgment in the *Critique*, other key elements of cognition, and our contributions to them, have already been laid out. It is still an open question whether Kant also took reasoning and hence the ideals of reason to be necessary to cognition.²³ (Since I believe these ideals are involved in concept formation as well as reasoning, they already appear in the account.) Further, epistemologists would certainly question whether any of these alleged necessary conditions is actually required. I cannot enter those debates here. What I believe I have provided is a clear and plausible account of Kant's central argument that Self-Consciousness is a necessary ingredient in cognition—given what he understood by “Self-Consciousness” and given what he took to be the necessary conditions for cognition. In the concluding section, I try to provide needed support for J11 by addressing an issue that I have kept in soft focus: assuming that intuiting, recognizing, and judging suffice for knowledge, and that they involve an Imp-R-Consciousness of certain cognitive activities, can such consciousness reasonably be characterized as a “Self-Consciousness”?

4. Is Imp-R-Consciousness of Cognitive Activity really Self-Consciousness?

Why did Kant believe that implicit R-Consciousness of the mind's intuiting, synthesizing, and combining activities amounted to something reasonably called “self-consciousness”? Claims about self-

²³Neiman (1994, 89ff.) offers an extensive discussion of this issue.

consciousness encompass a plethora of issues, and I will be able to address only three key implications here. Why did he believe that the various faculties of intuition, concept formation, and understanding belonged to a common subject? Why did he believe that consciousness of these activities was especially important? How could he equate consciousness of the activities of the necessary faculties of a cognizer *überhaupt* with Self-Consciousness, consciousness of an individual self? I will also try to diminish the strangeness of his doctrines by showing how they relate to a couple of common assumptions about selves and self-consciousness.

Kant's project in the *Critique* was to discover how cognition was possible, and this included a search for the necessary activities (and so faculties) involved in cognition. Assuming that his conclusions about the necessary conditions for cognition were correct, it would seem to follow that a cognitive subject must have faculties of intuition, concept formation, and judgment (as well as imagination and reason). Notice, however, that the same discoveries might instead prompt a revision in the original hypothesis: there is no one cognitive subject, but merely a collection of cognitive faculties.

Kant's reasons for rejecting a collection in favor of a common subject are clear from his general teleological approach and from a particular line of argument in the Paralogisms. In the Second Paralogism, he considered the representation of a single verse, and not of all of cognition, but the point is the same. If the words of the single verse were distributed across different substances, then none of the substances would represent the whole thought (A 352). Similarly, if faculties were contained in different [and independent] substances, then none of these substances would be a cognizer. Of course, Kant's conclusion was not that the unity of thought required that subjects be simple substances; rather, the "unity of thought was collective" and so could be realized by different substances "operating together" [*mitwirken*] (A 353). But his subsidiary conclusion was that the renowned argument from the unity of thought did establish something. It showed that these substances could not be understood as wholly distinct: to represent a thought, they had to function together. The same conclusion would follow about faculties: to produce cognition, they must function together.

By "operating together," Kant did not mean simply that different parts of the mind or different faculties must jointly produce

cognition as, perhaps, the workers in a factory jointly produce Fords. He maintained that some phenomena could be adequately understood only by considering their roles in whole organisms. Although he did not address the issue of teleology explicitly until the *Critique of Judgment*, this approach is evident in all of his discussions of mental faculties. So, for example, despite his signature attack on reason, he explained that the ideas of reason must have a legitimate use, because “everything which is grounded in the nature of our powers must be purposive [*zweckmässig*] and agree with [their] rightful use” (A 642 / B 670; see also B xxiii). It is not just that a faculty of synthesizing intuitions in concepts would fail to produce cognition in the absence of a faculty of intuition; fully to understand why such a faculty exists we must see it as part of a larger whole that includes a faculty of intuition. The faculties explain how cognition is possible, but their contributions to the goal of cognition, and hence to the functioning of a cognitive subject, are an important part of the explanation of why such faculties exist (Ak. 5:373). In contemporary terminology, Kant was a “teleological functionalist” (Lycan 1987, 44), who sought to characterize faculties in terms of their contributions to cognition. Because he understood faculties teleologically, he would have dismissed out of hand the suggestion that there is no cognitive subject, but only a collection of faculties. Although teleological functionalism has sometimes been subjected to serious criticism, I take the ancient and contemporary support for this approach as ample evidence that he was justified in adopting it.

If an adequate explanation of cognition must advert to both faculties and cognitive subjects, then there is a clear sense in which the activities of a faculty are also correctly described as activities of the whole cognitive self of which the faculty is a part. Still, it is reasonable to worry whether this sense is relevant. In some contexts, it is correct to say that when my finger moves, I also move; in others, that seems misleading (because my finger is not enough of me). I will return to the special relevance of the activities of the cognitive faculties to the cognitive self below. First, I will take up the question of generic versus individual selves.

Kant was concerned to discover the necessary conditions, including the necessary faculties, for cognition *überhaupt*. How could this project lead to conclusions about Self-Consciousness, consciousness of (individual) selves? To answer this question, we must

consider his model of a functioning cognizer in somewhat more detail. First, although he maintained that all cognizers must possess certain types of basic faculties, he recognized that these faculties came in different strengths in different individuals (Ak. 7:162ff.). Second, and much more importantly, he was adamant about the importance of sensory data. Sensory stimulation was required both to awaken our faculties of synthesis and to supply them with data to connect (B 1, A 1). Further, although he resisted offering hypotheses about psychological development, he clearly did not believe that cognition emerged upon the first awakenings of our combining faculties. To make judgments, subjects required the relevant concepts and an adequate store of causal and substantial beliefs.

On Kant's view, our concepts and beliefs were built up over time, by a continual series of creative acts integrating new data (compare B 113–15, A 649 / B 677, A 728 / B 756). At some point, about which he could not and did not speculate, a sufficient number of syntheses had occurred so that a set of concepts and beliefs sufficient for cognition was in place. Now consider what happens upon the presentation of current data about a ship. He argued that to make the judgment that the ship had moved, a cognizer must be aware of some such explicit or implicit P-Content as "currents *cause* buoyant, untethered objects to move." By the LH principle, in being conscious of these causal contents, the subject would also be implicitly conscious of the combining activities that produced them. These activities were not generic acts of combination, however, but the combinings of actual sensory data with each other and/or with actual previous representations. Since those representations were themselves produced by previous acts of combination or synthesis, a subject, in being conscious of some P-Contents, would also be Imp-R-Conscious of a sequence of creative acts.

Given reasonable assumptions about the variety of sensory experiences across different cognitive subjects, each sequence of creative acts would be qualitatively different. So as I began life looking at suburban Connecticut, another might have had early experiences of rural Sussex. Since later acts of combination involve contents produced through previous combinations in the sequence, over time cognizers would appraise current data by combining them with an ever more idiosyncratic set of contents.²⁴ Hence, in being

²⁴Kant sometimes suggested that each of our representations was involved in the production of all later representations (for example, A 110).

implicitly conscious of sequences of combining activities, cognitive subjects would be conscious of something that is at least as individual as a set of memories.²⁵

Let us now return to the question of why Kant believed that creative cognitive activities were especially relevant to cognitive selves, and hence that consciousness of such activities had a special claim to be regarded as consciousness of a self. On his theory of cognition, neither representations nor cognitive selves preexisted the receipt and synthesizing of sensory data. The syntheses that were necessary for cognition were also necessary for the creation of a functioning cognizer. In the ship case, for example, it is clear that even a set of faculties that were so interrelated that they could work together would not suffice for making judgments. The conceptual and belief contents that made judgment possible must first be produced by spontaneous faculties. After those contents had been supplied, the remaining prerequisites for a cognitive self would be in place. *Once this has occurred*, consciousness of the activities that continue to create the needed contents is aptly called a “Self-Consciousness,” because it is a consciousness of those activities that are essential to being a cognitive self and that continually create an ever more distinctive cognitive self. For contrast, consider the case of reading. Kant agreed with then contemporary opinion that readers were conscious of many features and many activities that they could not report or recall (Ak. 2:191). Since readers were (implicitly) conscious of the activities of their minds, they were self-conscious in a sense. But since reading was not necessary for cognition *überhaupt*, in being conscious of whatever additional mental activities were required for reading, cognizers were not conscious of the activities that made them cognitive selves.

Even granting that Kant had good reasons for postulating a cognitive self in addition to various faculties, and good reasons for regarding cognitive selves as distinct individuals, and even good reasons for fastening on consciousness of creative cognitive activi-

In the text, I assume only that a current representation is produced from a sequence of some earlier representations.

²⁵Although Kantian cognitive selves can be distinguished from each other in terms of the sequences of synthetic acts that produce their stores of concepts and beliefs, this means of differentiating selves is vulnerable to the same problems of duplication, splitting, and the like that have been raised against memory criteria of personal identity.

ties as a privileged type of self-consciousness, his senses of “self” and “Self-Consciousness” may seem so removed from ordinary usage that J11 still seems tendentious. Although I cannot canvass the standard senses of “self” or “self-consciousness,” I will conclude by relating his *prima facie* alien notions to two more familiar ideas, the association of a self with a particular viewpoint and the quest for (explicit) self-consciousness.

We often talk of different people as having different points of view or as having particular, even unique, outlooks on the world. Kant’s account of the creation of cognitive selves would help explain the widely recognized correlation between individuals and viewpoints. On his theory, the individuality of cognitive selves is not a matter of their experiential histories *per se*—what has happened to them—but of the sequences of creative acts that they have performed in response to sensory experience. These sequences produce a causal and substantival understanding of the world through which subsequent sensory data are evaluated as real or illusory. Hence Kant’s theory has the plausible implication that what makes us individual cognitive selves, *namely* the different sequences, also helps to explain why individuals differ in the way they see the “same” events. Interestingly, Kant’s view of the grounds of cognitive individuality are consonant with recent work on personality differences. Some contemporary psychologists argue that subjects’ distinctive ways of taking in new information may be more stable across situations than traditional character “traits,” and so might provide a better construct for theories of individual personality (Mischel and Shoda 1995). If these results stand up, then our “standard” views of selves may move closer to Kant’s. Nevertheless, the Kantian explanation of the correlation between individuals and viewpoints can only be partial, because it has no place for the role of emotion in cognition.

When Kant’s theory of the cognitive self is understood in terms of the creation of different epistemic points of view, then his claim that we are Self-Conscious in being conscious of creative cognitive activities does not seem so *outré*. Ordinary views should allow that consciousness of some of the factors that give us unique outlooks is a kind of self-consciousness. Still, Kantian Self-Consciousness may seem misnamed, because it is implicit. As noted, the possibility of implicit as well as explicit consciousness has been recognized for close to three hundred years; the notion of consciousness of ref-

erential contents has been around even longer. But “self-consciousness” is often used as nearly synonymous with “self-knowledge,” which is usually taken to be explicit. Granting this divergence from ordinary usage, there is still an obvious relation between Kantian Self-Consciousness and the philosophically important sense of “self-consciousness” as “self-knowledge.” Individuals who strive for self-knowledge seek an explicit understanding of the springs of their thoughts and actions. In part, they want to understand their particular viewpoints on the world and why they have them. If Kantian epistemology is right, then *part* of what those who seek self-knowledge want is an explicit consciousness of the activities of their minds in creating their causal and substantial understanding of the world, activities of which they are implicitly conscious throughout cognition. “Imp-R-Consciousness” would be related to one central sense of “self-consciousness” as two different forms of awareness of some of the same processes.²⁶

* * * *

Kant’s doctrine of the intimate connection between Self-Consciousness and cognition has often been regarded as obviously false or as a dark reflection of Descartes’s *Cogito* or as both. It is always lamented as the seemingly unfathomable intersection of a murky notion and a complex theory. But if we consider then contemporary ways of understanding consciousness and his own highly original theory of the cognitive self, then we reach the unexpected conclusion that the highest principle of Kant’s philosophy is both intelligible and plausible. We also recognize that the *Critique’s* linking of cognition to Self-Consciousness is a fairly direct consequence

²⁶Those who seek self-knowledge also wish to understand why they act as they do. According to Kantian ethics, moral action requires a consciousness of the conformity of maxims to the moral law. But Kant also suggests that the moral law is just the “self-consciousness of a pure practical reason” (Ak. 5:29). Although I can hardly defend the point here, I take those two claims together to imply that, on his theory, moral action requires an implicit consciousness of the activity of applying the spontaneously generated moral law to particular maxims. If this interpretation can be defended, then both Kantian epistemology and Kantian ethics would argue for the necessity of an implicit consciousness of *some* of the springs of thought and action that seekers of self-knowledge hope to understand explicitly. As noted in the text, Kant’s account of the foundations of thought and action must be only partial, because he avoided the emotions in epistemology and even in ethics.

of what Coleridge recognized as the key to the Critical philosophy: Kant's insistence on the "shaping powers" of the mind.²⁷

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²⁷From "Dejection."

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