

Concepts of Consciousness

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Psychologists again find themselves at a point in the historical development of their science where close attention to meanings will be invaluable in overcoming the conceptual confusions and difficulties of mutual comprehension that so frequently attend scientific discussions of consciousness. The present article consists of a sustained effort to improve our sophistication with respect to some of the main concepts in terms of which we think about the various referents of the word *consciousness*. Each of the six major sections of the article concentrates on one ordinary concept of consciousness together with certain constructed concepts from psychology and related fields—concepts that purport to have approximately the same referent as the ordinary concept does. The concluding section interrelates the main concepts that are discussed in the previous sections by means of four dimensions of meaning: the intersubjectivity dimension, the objectivation dimension, the apprehension dimension, and the introspection dimension. Having considered these important concepts of consciousness closely and made some intensive use of them, we may hope to put them to effective use in the future without awkwardness and ambiguity.

Introduction

How shall we join the phenomena of consciousness to the word? Contemporary psychologists who address the problems of consciousness enter thereby an important area of potential scientific inquiry that is both difficult and neglected. At the same time, they enter as well a conflicted sphere of their collective psyche. I surely do not need to demonstrate here the curious fact that, after years of revival, the topic of consciousness still awaits to be fully admitted into mainstream psychology. It is as though American psychology were working through, over numerous sessions of a protracted self-therapy, some very strong defenses against consciousness. Insight into “the problem” occurred some time ago. The existence of the repressed and its relevance to comprehending human mental function have been acknowledged. But the patient struggles on to give to the phenomena of consciousness *an enlightened form of expression*.

Psychology's conceptual achievements have taken place without reference to consciousness, and seem irrelevant, at present, to the development of an adequate account of the respective phenomena. As Hilgard (1980) recently stated, “the new freedom” psychologists have granted themselves to engage the problems of consciousness does not entail that they are well prepared to do so. For they possess *a deficient conceptual apparatus*, due to the topic's long

neglect, and may find themselves unable, in some instances, even to say what it is that requires explanation. In a review of a book by Hilgard (1977) on "divided consciousness," Neisser (1979) expressed similar doubts. He admitted that consciousness is among "psychology's chief responsibilities," but he wondered whether psychologists are now up to it: "We were equal to the responsibility in the age of Freud, James, or Külpe—and of Janet, whose concepts Hilgard seeks to revive in the book. Unfortunately, they have found few worthy successors in our profession" (Neisser, 1979, p. 99). Neisser diagnosed a dissociation in the thinking of his modern colleagues between the "fascinating phenomena" of consciousness and psychology's "hard-won conceptual achievements."

No individual familiar with the history of psychology will be surprised that, at the present time, *conceptual confusions and difficulties in mutual comprehension* attend scientific discussions of consciousness, even where the participants are relatively sophisticated students of the topic. This fundamental disorientation can be illustrated by reference to the published version or description of three recent scientific conferences.

1. A discussant at a conference on "Consciousness and the Brain," objecting to another speaker's formal presentation, stated, "What Eccles means by 'consciousness' and 'conscious' is the major difficulty in understanding and assessing this part of his argument for the conscious self, and the above definition does little to ameliorate the problem" (Savage, 1976, p. 137). The discussant tried to bring some clarity to the discussion by distinguishing three possible senses of consciousness. But the speaker found these distinctions confusing and of no use to him, and proceeded to restate his argument in the terms that had, in the first place, produced the problem of communication.

2. Another recent conference included among its many sessions one devoted to the "Evolution of Consciousness." The chairperson's introduction to the session was already (and similarly) troubled:

Yesterday we were exposed to many statements regarding consciousness. But one of the problems was that people were not communicating because terms remained undefined . . . I now ask the speaker to let us know which definition of consciousness he is addressing . . . This should help us understand each other. (Pribram, 1979, pp. 701-703)

3. More recently, some leaders in the scientific study of consciousness gathered to exchange their findings and ideas. It is to their credit, in my view, that they also wanted "to force into sharper focus [their] evolving concepts of consciousness" (Puccetti and Klein, 1980). However, early in the three-day series of symposia and other meetings, a rather elementary conceptual disagreement arose, and recurred over and over again throughout the conference. This led one of the participants to propose that two kinds of consciousness be consistently distinguished by use of subscripts. We are told that

"something of a consensus" gradually emerged among the members of the conference as a consequence of this suggestion.

Some psychologists seem to realize that ordinary discourse, having been shaped in the laboratory of daily life, contains a rich store of discriminations that will prove invaluable in helping psychologists to *get and to maintain their bearings* in the "new" field of scientific inquiry called consciousness. Among the objections Neisser (1976) raised concerning what cognitive psychologists have lately done with consciousness was the fact that they have not done justice to the various senses of consciousness in ordinary discourse. Upon assessing the current status of cognitive psychology, Weisberg (1980) agreed with Neisser's criticism: "From these various examples, one can see that consciousness is not a simple concept at all, and if we simply equate consciousness with a single stage of processing, or a processing center, we exclude most of the complexities of the concept" (p. 137). The present conceptual situation as regards consciousness in psychology led Natsoulas (1978) to propose that psychologists begin somewhat "ex-centrally" in the effort to bring their concepts of consciousness into sharper focus. That is, a common-sense point of departure recommended itself to Natsoulas, in view of the existent biases of a psychology that has practiced for so long powerful opposition to the respective subject matter. The biases are not mere biases pertaining to theoretical orientation, mode of approach to problems, and the like. They are biases against consciousness itself. The phenomena that we want to bring under scientific description are held to be suspect by many psychologists. Consequently, ordinary discourse recognizes important psychological phenomena about which psychology has little or nothing to say.

I believe that psychologists find themselves now at a point where close attention to *meanings* can help them reduce their confusions about consciousness. But to dwell on conceptual questions, as I shall do here, will run against the grain of a field of science that has been noted for its fastidiousness in regard to method, though, unfortunately, *at the expense of concepts*. Psychology's traditional hasty treatment of the very concepts in terms of which psychological thought proceeds is justified typically by its pragmatic value; and indeed, it does provide sufficient orientation to allow experimentation to move right along. However, it does little to overcome the conceptual confusions that so often arise, and may actually increase them through *difficult-to-avoid referential displacements*. In the following and other statements about psychology, Wittgenstein, Koch, and other methodologists have also made the latter point.

The confusion in psychology is not to be explained by its being a "young science" For there exists on the one hand a certain experimental method, and [on] the other hand conceptual confusion; as in some parts of mathematics there is conceptual confusion and methods of proof In psychology there is what is problematic and there are

experiments which are regarded as methods of solving the problems, even though they quite by-pass the thing that is worrying us. (Wittgenstein, 1947/1980, p. 180e)

Definition of abstract, general, or referentially "rich" concepts upon any delimited base of "epistemic simples" (such as a putative class of "physical thing predicates" or of verifying "operations") simply does not work. Such reductive definitional schemata confound symptom and meaning: if taken seriously they denude the universe of everything worth talking, or indeed thinking, about. (Koch, 1980, p. 45; cf. Koch, 1975)

My intent in the present article is unabashedly pedagogic. I want to improve our sophistication with respect to some of the main concepts in terms of which we think about consciousness. I shall be extending here the limited though useful work on concepts of consciousness begun by Dewey (1906) many years ago. I shall focus on six ordinary concepts of consciousness as these are rendered more or less explicit by the *Oxford English Dictionary* (OED). And I shall relate them to closely similar concepts from psychology and related disciplines. In the following six main sections of the present article, these six concepts also provide me with a succession of departure points for discussion of what might be called *different kinds of consciousness*.

When Neisser (1979) contended that our early psychological predecessors were equal to the responsibility of consciousness, perhaps he was right. But Dewey (1906) felt it necessary, anyway, to do for his colleagues what I shall do here in greater detail for my contemporary colleagues. Even at that time, when psychological giants walked the earth, ambiguity and misunderstanding existed with regard to consciousness, even among these who were expected to excel in clarity. Dewey thought that his contribution would be appreciated as more than a merely linguistic one. *For there are important implications in the concepts we use to think about consciousness, and making our concepts explicit will allow us to bring their implications under greater control.*

Consciousness₁

I shall consider, in this first main section, what Dewey (1906) called the "social, or joint, use" of *conscious* and *consciousness*. This use will be of special interest to those psychologists who believe that one or more kinds of consciousness are *products of human sociality*. "Joint or mutual knowledge" is how the OED's first entry under *consciousness* defines the word. Equally brief is the solitary example of usage that is provided: In 1681, an author wrote of "consciousness, or mutual knowledge of persons and their worship." Use of the word in this sense lasted for only a short time. Thus, no listing at all appears for it, or for *conscious*, in the *Middle English Dictionary*,¹ and the OED's

¹The word *consciousli* does appear there, but only as an unimportant synonym for *conscienceli*—which meant "in good faith, sincerely" or "scrupulously, justly."

two examples of the corresponding use of *conscious* also are taken from seventeenth-century authors: (a) In *Leviathan*, Thomas Hobbes spoke of being conscious in the sense of having joint or mutual knowledge: "When two, or more men, know of one and the same fact, they are said to be Conscious of it one to another; which is as much as to know it together." (b) The other illustrative quotation makes equally apparent the concept's interpersonal reference: "Nothing is to be concealed from the other self. To be a friend and to be conscious are terms equivalent."

The corresponding OED definition of *conscious* is "knowing, or sharing the knowledge of anything, together with another; privy to anything with another." One wonders why this meaning, which had been codified in Greek and Latin (see below) many centuries before, was singled out in seventeenth-century English and provided with a special term. The source of the word *conscious* may well stem from literary efforts in imitation of the Latin classics (cf. Lewis, 1967).² The OED indicates that the earliest recorded use of *conscious* was, in fact, a figurative one chiefly for poetic purposes. In 1601, Ben Jonson was already ridiculing this use, on the part of poets, for its classical pretention. Inanimate things were said to be privy to, to share in, or to be witnesses of human actions and secrets. Air, night, stones, walls, and groves are among the things that have been described as conscious in the sense of their being cognitive participants in the activities of human beings. If indeed the ordinary use was a chip off the figurative one, it would be somewhat less surprising that the word *conscious* continues to perform its figurative function whereas the parallel ordinary use became quickly obsolete.

Conscious and *consciousness* found fertile soil and their meanings proliferated, but the interpersonal dimension or its intrapersonal derivative has not been entirely eliminated from the subsequent senses. It lurks there to make mischief for the overconfident and gives pause to those sensitive to the *twists and turns* of human psychology. I shall make reference to it in discussing some of the other concepts of consciousness, and, in the conclusion, briefly compare in regard to it the six concepts of consciousness. Before comparisons can be made, however, there is more that needs to be said about the concept of consciousness₁.

In one of its two possible meanings, the Latin word *conscientia* referred to consciousness₁ or something very much like it. *Conscientia* was a nominalization of the verb *conscio*, which combined *scio* (I know) with *cum* (with), and meant either (a) I know together with someone, I share with someone the knowledge that, or simply (b) I know or know well. Therefore, one use of *conscientia* was simply as the equivalent of "knowledge, awareness, apprehen-

²According to Lewis (1967) *consciousness* was not formed to express a new meaning; it served at first as a useless synonym for *conscience*. In fact, the transitional use of *consciousness*—to refer to joint or mutual knowledge, (i.e., consciousness₁)—was coupled from the start with a use closer to that of *conscience* (see the section on consciousness₂ in the present text).

sion—even something like mind or thought” (Lewis, 1967, p. 181). This “weakened sense” of the Latin word corresponds to another concept of consciousness and not to the concept of consciousness₁. But *conscientia* was also used to refer to the state of knowing something *together* with someone.

Lewis (1967) found that this “together sense” was not captured by any modern English word, and coined the verb *to conscire* for the purpose. Its phonetic resemblance to the verb *to conspire* can serve as a reminder of the common aspects of their respective meanings. Someone was my *consciūs* (*conscia*) in Latin, if he (she) was my accessory, accomplice, or confidant. And those who “conscire” with each other, as Lewis would say, are in a secret together; they are in each other’s confidence about something. When such a word was in actual use, in ancient Rome, a guilty secret was the normal implication.

My consciūs, the man who was consciūs mihi, who shares my secret, who can give evidence about something I have done is usually the fellow-conspirator; therefore, the possible witness against me, the possible blackmailer, or at the least the man who can taunt me with my deed and make me ashamed. (Lewis, 1967, p. 185)

Consistently, the interpersonal relation to which *consciousness* referred in the seventeenth century was not simply the state of two individual’s knowing the same fact. Independently knowing the same thing another person knows is not to know it “together with” the other. In order for two people to exemplify consciousness₁ in respect to each other, they must know it “jointly” or “in company with” each other. Thus, the particular knowledge of interest, which they possess, is, in a sense, a collaborative kind of knowledge. The following three points spell this out.

1. *One knows the other knows about X and the other knows one knows about it.* Though necessary for consciousness₁ this fact could not qualify the two people by itself. For example, I have not yet met the man who recently bought and moved into a house on the street where I live, yet I know that he knows the name of the street and it is quite possible that he knows of my existence and therefore knows as well that I know the name of the street. At the same time, I do not know whether he knows of me and he does not know whether I know of him.

2. It would seem consciousness₁ requires the following additional knowledge. *Each person in the relation must know that the other person knows he or she knows about X.* But again, this mutual iterative knowledge could characterize two people who had never met or communicated. For example, two experts on the flora of Cape Province are told for the first time of each other’s existence and that the other has been told. From this, they could infer at once that the other knows about a plant common to the area, and each would know that the other knows that he or she knows about the plant.

3. What needs to be added, then, in order for two people to be conscious, with each other? Dewey's (1906) mention of a closely related sense of *conscious* is suggestive of what an additional element might be. To be conscious, in this sense, is to be "'privy to,' a cognizant accomplice of—usually, a guilty knowledge" (p. 39). This may not represent a distinct meaning, but putting it in this manner suggests that in being conscious, *each person must be occurrently aware of the relevant facts about X and each other while being aware that the other also is actively apprehending them.* Again, the knowledge is not merely shared and reciprocal; it is also a joint or companionate kind of knowledge, as may occur when, for example, people are engaged in religious worship together.³

Similarly, Asch (1952) specified his technical concept of being "socially conscious" in terms of the two participants' occurrent awarenesses of each other and their immediate surroundings. As should have been evident, the concept of consciousness₁ also allows for the individuals in the specified relation to be together concerned with past events of mutual interest. The following is Asch's account of the pattern of awarenesses that essentially comprises two people's being "socially conscious" with each other.

Each includes in his view, simultaneously and in their relation, the following facts: (1) A perceives the surroundings, which includes B and himself; (2) A perceives that B is also oriented to the surroundings, that B includes himself and A in the surroundings; (3) A acts toward B and notes that B is responding to his action; (4) A notes that B, in responding to him, sets up the expectation that A will grasp the response as an action of B directed toward A. The same ordering must exist in B. (pp. 161-162)⁴

The concept of "social consciousness" (as Asch called it) or the social concept of consciousness is a concept of "things-in-relation producing ordered effects that depend on the properties of the participants" (Asch, 1952, p. 252). Omitting such a concept from the social scientist's repertoire would produce, according to Asch, unwelcome theoretical consequences: Either one would identify "group consciousness" with processes in isolated individuals or one would make it a characteristic of a "group mind." The latter is to postulate what does not exist, whereas the individual interpretation is faulty for neglect-

³I have not included a condition of privacy or secrecy for good reason, namely, because of such cases as the one pertaining to joint worship. The concept of consciousness₁ readily applies to people in on a secret, but it is applicable as well to a kind of relation between people that does not involve the deliberate exclusion of others.

⁴Otherwise, according to Asch (1952), it is not possible for two people to share actions, feelings, ideas, and mutual acknowledgment. But he did not propose his concept of "social consciousness" as an alternative to other concepts of consciousness—as Barlow (1980) did with his own social concept of consciousness (see further on in the present section of text). To answer the question *whether someone is conscious*, according to Barlow, we try to establish contact with him or her in order to determine his or her present ability to enter into "relationships," or to "relate" to others. We test the person in this way because "the notion of consciousness . . . refers to relationships" (p. 83).

ing the relational level of analysis. To attend entirely to the individual's processes is similar to trying to explain how the brain works in terms of sums of neuronal events, as opposed to their pattern and organization (see Sperry, 1969).

Each of the two participants in a social interaction involving a "mutually shared field" (Asch, 1952) is characterized by a certain kind of psychological state attuned to the psychological state of the other participant in the interaction.⁵ The two people cannot be "socially conscious" with one another if either (or both) of them is failing to share in the mutual field. Their respective psychological states constitute the relation between them of consciousness; consciousness in the social, first sense takes place when people stand to each other in a certain relation by virtue of their individual psychological condition. Therefore, a psychologist concerned with cognitive processes might well consider any interpersonal concept of consciousness less basic than concepts that refer to the individual independently of other people. He or she would want to explain the occurrence of consciousness₁ in terms of processes that occur in the two people involved.

The plasticity of the latter processes ought to be considered, however, before acceding to this seemingly straightforward view from individual psychology. Do not such processes come to resemble in form and combination certain cognitive relations between people? Perhaps some of them derive from the individual's being conscious₁ and theoretically require consciousness₁ as a model. The neurophysiologist Barlow (1980) recently took this view, clearly and emphatically. The person develops an ability to be conscious on his or her own from being conscious with others. *The primary form of consciousness is social-relational.* "Consciousness is something to do with a relation between brains rather than a property of a single brain" (Barlow, 1980, p. 82).

Barlow (1980) had been trying "to relate subjective experiences to the physical properties of sense organs and nerve cells" (p. 81). More recently, however, he chose to characterize a person's immediate conscious experience as a kind of *rehearsal for recounting* what he or she is experiencing to someone else. Segments of the course through time of one's experience become conscious not when they possess a certain intrinsic property (e.g., when they switch into "the conscious state") but rather when they serve as immediate material for a potential or actual cognitive relation to someone else. This

⁵A statement by Asch (1952) concerning being "socially conscious" is of particular interest for how it parallels statements that psychologists have been making lately, with some frequency, about consciousness in another sense. Not all social interaction requires a full mutually shared field. Interactions that do not so require occur more or less automatically. An example is the receipt of a cup of tea, or moving out of someone's way. "But when something goes wrong in such habitual situations the full character of the mutual psychological field will assert itself" (Asch, 1952, p. 164). Other, more individually oriented psychologists would say that, in such cases, what asserts itself is some kind of self-awareness that is absent in the totally automatic instance.

relation was said to involve, typically, the interactions of speech. It also occurs without speech. Barlow mentioned an intriguing example of the latter, though he left it, unfortunately, completely undeveloped: An animal exemplifies the relation of consciousness when it "responds personally" to another animal or to its master.

In this statement of his view, Barlow (1980) did not spell out the essential characteristics of consciousness as he saw them. He did say that one of them is the occurrence of "communication," but this was not explicated except as "mainly talk." In responding to each other, the two participants in the consciousness relation take, it would seem, each other's point of view into account. Barlow might want to use the concept of consciousness₁ for his purposes; or perhaps consciousness already is, for Barlow, a simultaneous reciprocal cognitive relation in which both parties to the relation are aware that the other knows he or she knows about X. How else can we explain Barlow's unexplained choice of the moment a baby first smiles at its mother as representative of the birth of its consciousness? Surely, he did not mean a stimulus-response relation or the baby's recognition of the mother and what she will provide. From Barlow's discussion, I would surmise that the baby's smile has to be, to extend Lewis's coinage, "conspiratorial." The baby must smile *at* the mother, not simply smile in response to the mother. In Asch's terms, the kind of smiling that is relevant here is part of a social interaction that involves a mutually shared field. The exchange of smiles is a mode of mutual acknowledgment that depends on a joint cognitive relation (i.e., on consciousness₁).

Thus, a neurophysiologist with a professional interest in consciousness has proposed for scientific purposes a social concept of consciousness, if not the exact one just mentioned. In Barlow's scientific field, the typical approach is, rather, to search for brain properties to identify with conscious qualities, or to search for a center of consciousness in a structure of the brain. Barlow's concept implies that this typical approach is misdirected.⁶

Making relations [between brains] its primary seat leads to a very different view of consciousness. It can no longer be thought of as something added to the physical brain, "emerging" when the brain reaches a certain size, maturity, or complexity The question how the brain brings about these [social] interactions loses interest, for there is no reason to believe that the mechanisms of the brain achieve this function differently from any others. (Barlow, 1980, p. 87)

⁶Barlow (1980) expected to find support for his concept outside the group of neurophysiologists and biologists. As it happens, his view is reminiscent of the social psychologist Mead's (1934) second of two concepts of consciousness. (For a discussion of these concepts see the section of the present text that is devoted to consciousness₂.) The similarities between Barlow's concept and Mead's second concept become especially evident with the following statement. "Self-awareness would then result from a brain modelling the reaction of other brains, and incorporating the fact that the others, like itself, are nodes in an interacting network" (Barlow, 1980, p. 84).

The neuropsychologist Luria (1966, 1969/1980, 1978) was similarly critical of efforts to determine the brain mechanism of consciousness and of other higher mental functions. He believed that the localization of these "functional systems" in circumscribed areas of the brain cannot succeed. For consciousness and other higher mental functions are products of historical development and of the person's early and later experiences in the context of certain historical conditions: "One of the major advances in modern materialistic psychology has been the introduction of the *historical method* by means of which higher mental functions are regarded as complex products of sociohistorical development" (Luria, 1969/1980, p. 9). The brain as a whole carries out these functions by means of a "working constellation" of elementary processes which can be localized. The following quotation from L.S. Vygotsky allows the resemblance of Luria's and Barlow's concepts to be seen more sharply. "A function which initially was shared by two people and bore a character of communication between them gradually crystallized and became a means of organization of the mental life of man himself" (Luria, 1966, p. 23). Barlow's stress on "communication" as an essential ingredient in the development of individual consciousness can also be found in Luria, who proposed that mental activity becomes "reorganized" through speech with the result that the developing person acquires consciousness.

But, it should be stressed, the concept of consciousness₁, in contrast, does not refer to a kind of consciousness that occurs in each of the two people who are involved in a certain kind of social interaction with each other. Nor does it refer to that which Luria referred to when he wrote of consciousness, or Barlow referred to when he also wrote of being conscious alone. The latter kinds of consciousness were said by these authors to be socially derived, whereas consciousness₁ is *necessarily interpersonal*. In the absence of one of the two participants, there can occur a truncated version of consciousness₁ which is essentially less than the real thing. For A to be conscious₁ with B, they must exemplify a certain pattern of awarenesses. Among these, A(B) is aware that B(A) is aware that A(B) is aware of X. Without A or B or someone to take his or her place, the concept of consciousness₁ is inapplicable.

Consciousness₂

Two people who were conscious₁ with each other would share some piece of knowledge about, probably, one or the other's actions or their joint actions. Analogously, when one is consciousness₂, one is in a position to give testimony about oneself. The OED describes consciousness₂ as "internal knowledge or conviction, knowledge to which one has the testimony within oneself; esp. of one's own innocence, guilt, deficiencies, etc." Dewey (1906) commented, "Here is a distinctively personal adaptation of the social, or joint, use. The

agent is, so to speak, reduplicated. In one capacity he does certain things; in another he is cognizant of these goings-on" (p. 39). It is as though consciousness₁ were driven inward, from being a relation between people to being a relation between a person and himself or herself. In early use, a qualifying phrase was added to ensure the communication of this personal meaning. One took care to speak of "consciousness to oneself" or to say that one was "conscious to oneself" of something; for *conscious* and *consciousness* could refer, as we have seen, to a relation between people, namely, to consciousness₁.

Crucial to the discrimination that I shall consider in this second section of the present article is the *locus of the witness or testimony*. The locus is said to be "internal" rather than "external" because one is conscious to oneself rather than conscious₁ with someone else. Being conscious₂ of something or that something is the case (about oneself) is "having the witness of one's judgment or feelings, having the witness within oneself, inwardly sensible or aware." Accordingly, when I am conscious₂, I take the role vis-à-vis myself of another person who would be conscious₁ with me in regard to something I have done (cf. the discussion below concerning George Herbert Mead's concept). As Dewey (1906) suggested, a kind of *intrapersonal duality* seems essential to the second meaning of *consciousness* and to the respective meaning of *conscious*. In being conscious₂, I am my own witness and in a position, therefore, to be my own confidant; for there are things about myself to which I am privy, and the testimony within myself is such, sometimes, that I would not share it except with a rare confidant. Properly qualified, the Latin *conscio* served frequently in speaking of *sharing guilty knowledge with oneself about oneself*. As a rule, the facts concerning myself about which I conspire with myself do not make my *conscientia* a good one; they produce reasons for wanting to keep the facts a secret (though I could be *consciis sibi*, conscious to myself, as regards something admirable). Thus, *nil conscire sibi* meant to know nothing *against* myself, and not simply to be privy to no knowledge about myself of any kind.

All examples of usage that the OED provides for *conscious to oneself*, and for *conscious* in the same sense, refer to knowing something personal that has ethical significance. This is etymologically as it should be, as is the fact that nearly all the illustrative quotations included for consciousness₂ refer to items of knowledge that one would want to keep to oneself, if only, in some cases, out of modesty. Included are the facts of one's guilt, one's ignorance, one's deficiencies of other kinds, one's well-spent life, and one's immeasurable superiority to others. Consciousness to oneself of one's innocence of a particular piece of wrong-doing will seem an exception. However, this example probably represents situations where one conspires solely with oneself by *default*; that is, no one will accept one's innocence and share one's knowledge of it with one.

The nature of what is known contributes to differentiating consciousness₂ from consciousness₃ and consciousness₄ (see the next sections below). What one is conscious₂ of is *uniformly objective*, although different opinions can exist about it. Am I in fact guilty? Was my life well-spent? Similarly, my deficiencies and ignorance are subject to appraisal by others. In assessing them, any authority I have is due to my being close at hand when relevant evidence becomes available. Applicable here is the "private cognizance" that Dewey (1906) opposed to a "private type of existence." The latter characterizes mental occurrences, because they can be directly known only by the person to whom they belong. In contrast, that which a person witnesses in consciousness₂ *may be witnessed as well by other people*, though often others are not in as good a position to do so.

The notion of sharing knowledge with oneself about oneself implies a certain psychological distance from oneself, and may seem paradoxical for that reason. Relative to one's own actions, one stands somewhat as another person does. For example, Potts (1980) suggested that sharing knowledge with oneself occurs in "examining one's conscience." One actively reconsiders what one has done and failed to do, calling to mind actions and inactions which it may be highly convenient to forget and thus save oneself from feeling shame. Being conscious to oneself of them means an active kind of awareness (thinking) of them of the sort another person would undergo were he or she consiring about them with oneself. In this sense, one shares with oneself knowledge that one might not share if one did not "examine one's conscience." If this still seems paradoxical (how could I know again what I already know?) perhaps the following statement by Lewis (1967) will help.

Man might be defined as a reflexive animal. A person cannot help thinking and speaking of himself as, and even feeling himself to be (for certain purposes), two people, one of whom can act upon and observe the other. Thus he pities, loves, admires, hates, despises, rebukes, comforts, examines, masters or is mastered by, "himself." Above all he can be to himself in the relation I have called consiring. He is privy to his own acts, is his own *consciens* or accomplice. And of course this shadowy inner accomplice has all the same properties as an external one; he too is a witness against you, a potential blackmailer, one who inflicts shame and fear. (p. 187)

However, internal judgment as to right or wrong is, conceptually, a matter of *conscience*; insofar as there is only consciousness₂, there is only the witnessing and the testimony. The intrapersonal relation of consiring with oneself does not necessarily include the exercise of conscience. But Potts (1980) made the following good psychological point, which has also worked itself into the language. "Logically, there is a transition from being witness to being judge but, psychologically, recall and judgment [as to right or wrong] are often simultaneous" (p. 4). The OED includes a subsidiary entry, along with *consciens* in the sense of the present section, according to which the word is

sometimes used to mean no less than "having guilty knowledge (*of anything*); *absol.* inwardly sensible of wrong-doing, guilty." Here is one of the OED's examples of this use: "She being conscious, did of her own accord . . . make confession of her wickedness." The meaning here would not be altered were *feeling guilty* substituted for *being conscious*.

Justification for this use of *conscious* must be found elsewhere than in the pure cognitivity and innocence of the inner judge, which is where it may first appear to lie. Rather, in the intense experience of guilt, one does not keep one's distance; one does not identify merely with the internal witness who has become the judge of one's actions as right or wrong. In passing judgment on oneself, the internal witness/judge becomes confused with the "culprit soul" (cf. Lewis, 1967). And so, too, the word *conscious*, which could be used to speak merely of being conscious₂, becomes "confused" in a parallel way and can serve an additional function, as in the OED's quotation about the woman who confessed her wickedness. There was more to her consciousness, in this instance, than judging her deeds to be wicked. It included something that led her to confess them. In the exercise of conscience, one becomes not only conscious₂, but may also become "conscious" (guilty) as she did.

Conscience and *consciousness* have reference to nonindependent human capacities. The exercise of one's conscience depends on having the witness to one's actions within oneself. Werblowsky (1958/1970) argued that the basic phenomenon in the exercise of conscience is less its moral content than the "knowing-with" that is involved. "Knowing-with" is that kind of consciousness whereby one is not only (a) the subject of actions, or the one who performs them, but also (b) the object of awareness, or the one of whom one is aware as performing the actions. Following Helmuth Plessner, Werblowsky (1958/1970) wrote of "eccentric positionality," which is a form of existence characteristic of human life: "Whatever man knows or experiences, it is always 'with'" (p. 85). Man typically experiences the world and himself as though from elsewhere. Not merely an actor and a knower, man knows that he knows, judges his actions, intervenes in what he is, and creates himself. This is *the ethical dimension* of being conscious to oneself; one's consciousness₂ puts one in a position to act with what one is and what one might be firmly in mind.

In virtue of the eccentricity of his positional form, man is a being who makes demands on himself. He "is" not simply and doesn't go on living, but is *worth* something and has value *as* something. He is moral by nature, an organism which tames itself by making demands on itself, which domesticates itself. He cannot live without mores, without allegiance to unreal norms which have in themselves sufficient weight to demand recognition Thus the essential fact of his positionality becomes what is called conscience, the source from which ethical life and concrete moral existence flow. (H. Plessner, as-quoted by Grene, 1968, pp. 110-111)

Werblowsky also proposed that man's eccentric position becomes projected into an experience of God, wherein God is spectator of one's life and the conscience of one's deeds (cf. Mead, 1922).

Conscience should not be viewed as a kind of consciousness that is always, as it were, aware of itself. In other words, *a person's being conscious₂ of something does not imply that he or she is conscious₄ of being so*. Jung (1956/1970) in a discussion of conscience brought in the following case. He pointed out that one may not realize that one's unpleasant emotional state is a consequence of an action of one's own on which one has unwittingly passed a negative moral judgment. Jung was in error when he claimed, moreover, that in such a case there is an absence of consciousness₂. He held that the exercise of conscience could occur without one's being conscious₂: "The classical characteristic of conscience, the *conscientia peccati* ('consciousness of sin'), is missing . . . 'Conscience,' in the sense in which we defined it above, as a 'knowledge' of the ego, a *conscientia*, simply does not exist" (pp. 182-183).

It is clear from Jung's next move that consciousness₂, including the consciousness of wrong-doing, is not so easily to be denied in the above case. The person does, after all, judge his or her action to be morally dubious or wrong. The part of him or her that performs this act was said by Jung to be "an unconscious personality who, to all appearances, behaves like a conscious subject" (Jung, 1958/1970, p. 183). In my view, one must be conscious₂ in the exercise of conscience, but one's acts of conscience are not always conscious₄. Jung confused consciousness₄, which I shall discuss in a later section, with consciousness₂. Thus, he assumed that one could not be conscious₂ without being aware of it. That is why he introduced the idea of an unconscious *personality*, in order that "at some level" (as they say) the conscious₂ person can be conscious₄. Jung's unaware case indicates, rather, that one may be conscious₂ with respect to an action without being aware that one is passing negative moral judgment on oneself for doing it. Yet, as Jung said, one behaves "like a conscious subject." For one has become conscious₂ of the relevant fact about oneself, and can "look conscious" in the sense of showing signs of shame about it. At the same time, one may remain unaware that one is experiencing that particular kind of emotion and of its source.

In Mead's (1934) theory of the social origins of individual consciousness and the function in each of us of a generalized other, a concept of consciousness was developed that is similar to consciousness₂. Mead used and discussed two distinct concepts of consciousness, of which the first (a peculiar one that corresponds to none of the OED senses) is such that I am tempted to consider it in the next section with consciousness₃, but it does not fit there either. As we shall see, to be conscious₃ is to be aware, and Mead's first sense of conscious-

ness explicitly *excludes awareness*.⁷ Its purported referent is something one might call mere experience. Mead called it "the presence of objects in experience," where the word "objects" includes parts of one's organism and its activities (including toothaches, images, and the like) as well as external objects and events.⁸

Consciousness in Mead's second sense belongs only to individuals who are "self" conscious, even in the case of the simplest form of awareness (which is not equivalent to experience). That is, in awareness of something, there always is, according to Mead (1934), *an explicit or implicit reference to oneself*. For in consciousness, one is performing a kind of self-address; one addresses oneself about oneself or about something else. To be conscious of that to which one is responding, there must occur interactionally derived gesture or language; one reproduces in oneself both sides of an interaction. It is through this duality, that we become conscious in Mead's second sense. One point of view corresponds to responding to X, the other to responding to one's response to X.

In becoming conscious of a physical thing, we indicate to ourselves something about it, for example, the resistance it will offer to our effort to move it. We do this by taking the role of the physical thing in anticipation of its

⁷Together with other pragmatists, Mead sought to eliminate the subjective connotations of the concept of experience. He defined experience and "the presence of objects in experience" in terms of a *noncognitive* relation of the organism to its environment and its body. Thus, the "objects in experience" stand over against the organism "not in a relation of awareness, but simply in that of conduct" (Mead, 1925/1968, p. 53; cf. Tibbetts, 1974, p. 116). The organism "creates" such objects through its sensitivities and reactions. An object consists of those characteristics discriminated by an organism's reactions. As Morris (1934) stated, "The experienced world is conceived by Mead as a realm of natural events, emergent through the sensitivity of organisms, events no more a property of the organism than of the thing observed" (p. xix). Behavioral differentiation of the body and the environment can proceed without consciousness in Mead's second sense: "It is unfortunate that we conflate the terms *experience* and *consciousness*. The dog experiences pain but cannot refer to it, nor, according to Mead, is it conscious of pain" (Miller, 1973, p. 49).

⁸Recently, Gibson (1979) struggled with the words *awareness* and *consciousness* and probably with ideas very similar to Mead's. However, Gibson came out with a meaning for *awareness* that excludes what he called consciousness, rather than, as with Mead, a meaning for *consciousness* that excludes awareness:

Perceiving is a registering of certain definite dimensions of invariance in the stimulus flux together with definite parameters of disturbance. . . . The invariants specify the persistence of the environment and of oneself. The disturbances specify the changes in the environment and of oneself. A perceiver is aware of her existence in a persisting environment and is also aware of her movements relative to the environment, along with the motions of objects and nonrigid surfaces relative to the environment. The term *awareness* is used to imply a direct pickup of the information, not necessarily to imply consciousness. (Gibson, 1979, pp. 249-250)

To be visually aware was for Gibson, idiosyncratically, to register properties of the ambient array of light. "Visual awareness" does not necessarily involve, in his view, consciousness; (awareness; see next section) or any other kind of consciousness. It should not have been called awareness given all that that implies. In being "aware," in Gibson's use, the organism's relation to its environment is noncognitive: "The ability to perceive does not imply, necessarily, the having of an idea of what can be perceived" (Gibson, 1979, p. 250).

reaction, but we do so by referring to, or addressing ourselves with respect to it. We respond to our own anticipated action upon a physical thing, as an action that would have a certain ("this") effect—which we reproduce—because of the physical thing's nature. In sum, awareness of a physical thing is made possible by (a) anticipating responses to it, (b) responding to the anticipatory responses as though one were the physical thing, and (c) indicating to oneself, by means of significant symbols, the nature of the physical thing in view of this anticipatory "interaction" with it (Mead, 1938; cf. Miller, 1973).

The latter, third element is crucial for all kinds of consciousness including self-consciousness. Consciousness derives from "signification" which derives from social interaction. Together with our ability to take the role of the other, social interaction makes signification possible. A gesture becomes significant when the person learns, from interacting with others, to bring out by means of the gesture the same meaning "to or for himself" that he brings out in other people (Mead, 1934, p. 81). The verbal gesture is particularly suited to the development of signification, because the one who makes the gesture hears it in the way another person does; thus, one can indicate to oneself by use of the gesture the same thing one indicates to the other person.

The gesture not only actually brings the stimulus-object into the range of reaction of other forms, but . . . the nature of the object is also indicated; especially do we imply in the term significance that the individual who points out indicates the nature to himself. (Mead, 1922, p. 160)

Being conscious depends on performing significant gestures either overtly in communication or merely to oneself. But communicative social interaction qualifies as an instance of one's being conscious of something only if one's gesture also evokes in oneself the kind of reaction it does in the other person; that is, one must complete a communicative interaction at the same time on one's own—intrapersonally. The key point is that the verbal gesture makes it possible for one *to be to oneself as though one were another person*: One (a) responds to oneself as the other might and (b) brings out in oneself what the other would bring out by thus responding to one. "This expresses what is implied in the etymology of 'consciousness' as 'an experience with'" (Mead, 1938, p. 412).

Mead's second concept of consciousness is, in fact, a concept intermediate between the concepts of consciousness₁ and consciousness₂. It can refer to sharing knowledge with oneself about other things in addition to oneself—just as in being conscious₁, one shares the knowledge of anything with another. Also, Mead's concept is perhaps revisionary of the concept of consciousness₃ (awareness). In order for one to be aware of anything, according to Mead, one must engage in self-address using significant symbols. To have "objects in experience" is not *ipso facto* to be aware of them.

Consciousness₃

The third OED entry for *consciousness* defines it as “the fact or state of being mentally conscious or aware of anything.” Again, there is a corresponding entry for *conscious*. One may be conscious, in this sense, of facts, or of one’s sensations, feelings, or thoughts, or of external objects, or that something is the case. This use of *conscious* and *consciousness* is indeed, as Dewey (1906) stated, “a wide, colorless use.” Each time consciousness₃ occurs, it has one of an indeterminately large variety of contents. For, in this use, “‘conscious’ means *aware*: ‘consciousness,’ the state of being aware There is no discrimination nor implication as to contents, as to what there is awareness of,—whether mental or physical, personal or impersonal, etc.” (Dewey, 1906, p. 40). But the OED is clear that consciousness₃ always does have a content; in the particular instance, to be conscious₃ is to experience or to have a certain mental content.

A psychologist who proposes, instead, that we might be conscious₃ without being (or seeming to be) aware of anything at all stretches and mangles the sense of *consciousness* that I am considering here. One occasionally encounters comment on the possibility, and even the occurrence, of totally empty awarenesses, awarenesses without content. An author will attempt in this way to express a new truth about consciousness₃ as he or she sees it. But this “truth” is not the widely accepted fact that an awareness may fail to refer to something that has actual existence, that it may “aim” even where there is no “target.” The purported truth is that consciousness₃ need not possess content even of the kind one has in hallucinating or in having thoughts about a fictitious character. But how could there be an awareness without content? *How could one be aware without being aware, correctly or not, that something is the case?* Even an awareness of a thing’s not being where it was expected to be is an awareness that something is the case; for example, I look up from an absorbing conversation to find the room all at once emptied of other people. To be aware of emptiness or absence is still to have a content, for example, the content “I am having no thoughts.” I am aware that something is the case, namely, that nothing is happening or that no one is present.

The incoherent notion of a contentless awareness may be reached by a process of conceptual slippage. One begins thinking in terms of consciousness₃ only to mix into one’s thoughts a different concept of consciousness, namely, the concept of consciousness₆ (which shall be discussed later). In the sixth sense, *consciousness* and *conscious* are used absolutely, whereas the concept of consciousness₃ refers to a kind of occurrence that is *identified in each instance relative to a content*. One says, applying the concept of consciousness₆, that a person is conscious or not conscious or has lost consciousness or regained it. Perhaps this absolute use leads some people to expect to find an

appropriate absolute application of consciousness₃ as well. But consciousness₃ requires that the person be cognizant of something; otherwise, one has put to use a different concept of consciousness.

The OED's definition of consciousness₃ includes the qualification *mentally* in front of *conscious* or *aware*. What is the force of being mentally conscious or aware of something as opposed to being merely conscious or aware of it? Implicitly there may be a contrast here between (a) consciousness₃ and (b) possessing knowledge about something at a time when one is having no awarenesses concerning it. For example, my knowledge of a picture on the wall of my bedroom persists as I sleep; and I am not surprised to find the picture still there in the morning, when I awaken and have awarenesses of it once again. By using the qualification *mentally*, the compilers may have wanted to convey the idea of *occurrent awareness*. This was also, probably, Wittgenstein's (1949/ 1980) intention when, in a note, he drew very briefly the following contrast. "Consciousness that . . . may disturb me in my work; knowledge can't" (p. 163e). On the same point, White (1964) was explicit and clear: "'Consciousness of' something signifies the way in which the knowledge of it holds our attention and not the mere acquisition or possession of that knowledge" (p. 61). The activated character of consciousness₃ is indicated as well by all five of the OED's illustrative quotations for this sense. They are (with ellipses removed) as follows. "Let it become one with the very consciousness of my existence." "The anxiety of the proprietors seems to indicate a consciousness that this species of cultivation is more profitable than any other." "It is only to the consciousness of these evils that knowledge and reflection awaken him." "The consciousness of my existence is to me the assurance of my existence." "For a few minutes he lost the consciousness of why he was so miserable."

A *veridicality requirement* in the application of the concept of being conscious₃ quickly becomes apparent upon examination of relevant OED entries. That of which a person is conscious₃ must exist; and it must have the characteristic the person is conscious₃ that it has. Thus, "a man who sees a bush and thinks it is a rabbit is not conscious of the bush" (White, 1964, p. 60). But, for my part, I would not want to say so. Given the way I think about these matters, a false awareness seems no less an awareness to me than one that grasps its object's true character. Do we not undergo at times awarenesses of things that in fact do not exist? Psychologists need to be able to designate the consciousness₃ kind of occurrence without ruling out the illusory or mistaken instance. It is psychologically useful to be able to refer to hallucinatory awarenesses, and to be able to describe people as conscious of fictional entities while they are, for example, reading a novel. Ordinary discourse ought not to weigh so heavily on the psychologist that he or she cannot delete this

veridicality requirement for scientific purposes.⁹

Surprisingly, the OED states that to describe a person as conscious₃ of an external object is to apply the concept in a poetic way. But do we not speak today in ordinary contexts of our being conscious of such external objects as a rich brocade and a rageful eye? Do we not become conscious of them by means of our perceptual systems or by imagining them or simply thinking about them (cf. White, 1964, p. 60)? The OED may mean that we are never simply conscious of external objects; we are conscious always of facts about them. Perhaps the objects of consciousness₃ were held always to be internal in at least the sense that our beliefs about external objects are internal. In that case, consciousness₃ could be considered an encounter with something mental—impossible with external objects or anything having independent existence from the mind.¹⁰

The English language appears to have changed away from the OED's concept of consciousness₃. One is now said to be conscious of the ticking of the clock, of how dark the room has become, of someone's unseen presence,

⁹In the introduction to the present article, I wrote that ordinary discourse contains a rich store of discriminations that can help to orient psychologists who engage the problems of consciousness. I must acknowledge, however, that some adaptations to ordinary discourse have undesirable conceptual effects. I have in mind at the moment one adaptation in particular, namely, the contribution of the consciousness₃ veridicality requirement to the introduction of phenomenal or immanent objects. A relevant argument that proceeds to a specious conclusion is the following.

Indeed, consciousness₃ is the fact or state of being mentally conscious or aware of anything. This means that for a person to exemplify that fact or state, he or she must be aware of something. There is, in each instance of consciousness₃, something of which someone is aware. But that of which one is aware need not have physical existence. There occur, for example, hallucinatory awarenesses of pink elephants. Since one cannot be conscious₃ without there being something of which one is aware, this something must have a mental existence whenever it does not have a physical existence.

In this way, immanent or phenomenal objects may be theoretically introduced, for the purpose of matching whatever a false awareness takes to be the case. However, meeting the veridicality requirement (i.e., there is something of which one is aware in each instance of one's being conscious₃) is not worth the multiplication of entities. Better to cancel this conceptual requirement—shifting thereby to a new concept of consciousness₃—than to take a path that quickly leads to each person's having his or her own phenomenal world. Again, all instances of consciousness₃ have a content; however, some of them *fail to refer and have no object*, which is another matter.

¹⁰Cf. Opdyke's (1948) recommendation as to usage: "*Aware* pertains to that which is external to oneself, to outer impressions driven inward; *conscious*, to that which is internal, to inner feeling that may be held within or be forced to manifest itself in reaction of some sort" (p. 72). The examples of use in the relevant second OED entry for *aware* do seem more outwardly oriented, but *aware* is equated, at the same time, with *conscious*, and *awareness* with *consciousness*. Johnson's (1755) earlier English dictionary defined *conscious* and *consciousness* largely in terms of their internal referents (including the person's actions). The major exception was *conscious to*, which could be to "anything." Bunge (1980) has drawn, in a scientific context, a distinction like Opdyke's. An animal was said to be aware of exteroceptive and interoceptive stimuli but said to be conscious of its own brain processes. Awareness requires, in Bunge's view, only sensors and is therefore a capability of lower animals. In contrast, consciousness requires the ability to think. Thus, to be aware of a stimulus is not necessarily to have any thoughts about it; but to be conscious of a brain process is to think of it.

and the like. Our current concept of consciousness₃ refers to being aware of something or being aware that something is the case *without connotation regarding any particular kind of content*. All of the following surely qualify as instances of being conscious₃ of an external object: an occurrent awareness to the effect (a) that an external object has a certain characteristic, (b) that an external object has a particular identity, (c) that it is of a certain kind, and (d) that it is related in a certain way to something else. Nor must there be any single way by which awarenesses come to occur. For this reason, White (1964) called awareness "polymorphous." That is, becoming aware can take many forms. There is no special organ of awareness or means of being aware. There are many means. For example, the direct (introspective) awareness of a thought is differently produced than the visual perceptual awareness of the moon. And, how we become aware of what we are doing differs, normally, from how we become aware of what others are doing. Advances in knowledge and technology may allow us to become aware of things in the world as a result of direct activation of sensory cortex. Certain occurrences in ourselves vary with respect to content and how they are produced, yet what we are describing is an occurrence of awareness notwithstanding this variation.

Psychologists will need to address that which purports to be the common element in all kinds of awareness. They will want to know what the nature is of the occurrence called awareness by ordinary discourse. Many of them now think of awarenesses as happenings in people's nervous systems; of this, they are confident. When they themselves become aware of their own emotional state or of a part of their body or of something odorous in the air, and so on, they are sure that their awarenesses, or their "noticings," of these things or states of affairs take place in their brain. Also, they often recognize that their awarenesses all have in common the characteristic of content. But their understanding of being conscious₃ leaves them at present fairly puzzled as to how this is possible, how a happening in the brain can have the kind of content that awarenesses have. *To be puzzled in this way represents a conceptual advance*. It means that one has grasped the concept of consciousness₃ (or a closely related concept) and is not making a variable use of it: (a) explicitly as though it corresponded to just another link, much like any other, in the causal chain, while (b) implicitly allowing one's use to revert to the ordinary use, which refers to a cognitive kind of occurrence with all that that implies.

Let us consider a case in point. When Hebb (1968) described the end product of the complex process of perceiving as both a brain process and "a cognition or awareness of the object perceived" (p. 468), he clearly had in mind the dimension of content. His theoretical account of this process (which he called "the percept") sought to explain, among other things, its being a perceptual awareness of something in the stimulating environment. Perceptual awarenesses, qua occurrences in the brain, were said to involve the activation

of both primary and higher-order assemblies of neural cells. The primary ones are normally excited sensorily, by stimulation of sense organs and sense receptors. They are responsible for our perceiving "a specific thing in a specific place with specific properties" (p. 473). On their part, the higher-order assemblies are supposed to account for our being perceptually aware of the object perceived as an object of a certain kind. Also, they make it possible for us to think about objects abstractly. At such times, the activity of primary assemblies is minimal or absent, at least insofar as this activity is involved in the process of thought.

Through repeated sensory exposures to the appropriate visual situation, a baby was said to develop a secondary assembly whose activity is the visual perceptual awareness of a certain triangle as a whole in a certain orientation. The obvious question was never answered, or conceptual slippage occurred and a different, causal question was answered. As psychologists, we want to know *what the characteristics of the activity of this secondary assembly are that make it the perception it is*, as opposed to its not being a perception or its being a different perception. We are told by Hebb (1968) that the assembly that corresponds to an awareness of a triangle as a whole in a certain orientation develops out of the simultaneous activation of three first-order assemblies, which each correspond to a different straight line that has the slope of a side of the triangle in that orientation. (A tertiary assembly would be formed on the basis of repeated simultaneous excitations of different secondary assemblies that correspond to the same triangle in different orientations.)

Hebb's analysis only leads us to ask the same question about the three primary percepts that we asked about the triangle percept. What characteristics of the activity of the primary assembly make it the perceptual awareness (of a line) that it is? Although perception of a line was said to involve an "elongated narrow set of subassemblies" (see below), I am positive that Hebb (1980) would not contend that a brain process is a perception of a line because some of its activity forms a kind of line in the brain. Rather, Hebb's answer to my question seems to have been that it is a matter of *causality*, of how an assembly is reliably caused to be activated. To be specific, the primary assemblies of interest here are comprised of "simple cells" in the visual cortex that respond to specific retinal stimulation and allow for little variation in the stimulation. That is, they are highly discriminative in respect to such stimulation:

Perception of a line in the visual field depends on the excitation, by the line, of an elongated narrow set of subassemblies in the striate cortex (the primary visual area), as well as excitation of peristriate circuits activated by the particular combination of subassemblies and helping in return to maintain their activity. It must be assumed, if this is to account for the facts, that the subassembly has a very small extent in terms of visual angle, bordering on the microscopic in relation to the extent of the visual field. (Hebb, 1980, p. 102)

In effect, therefore, a primary assembly constitutes a particular perceptual awareness, with specific mental content, because the assembly is a reliable effect of a restricted form of stimulation.

This is, however, an inadequate answer to the question raised above, and one whose inadequacy may be obscured by the fact that it is couched in familiar causal terms. Certainly, an important part of the story of how we have perceptual awarenesses of external objects must be an adequate description of the causes of those awarenesses, which include, of course, their stimulatory causes. But we would include *too much on the effect side* if we paid attention exclusively to causality in defining the nature of being conscious. We do not want to count, for example, any and all effects of a certain state of affairs on our senses as perceptions of that state of affairs. Hebb (1980) has himself argued that a baby cannot be said to perceive simply because its eyes consistently focus on a diagram as opposed to a blank screen, though this discrimination depends on different neuronal effects by different stimuli. Dodwell (1975) was making much the same point in his comments on the discriminative electrophysiological responsiveness of single units in the visual system:

The physiological findings on contour coding should be viewed with caution, so far as pattern and object recognition are concerned. They tell us a great deal about the probable mechanism of pattern element detection, but almost nothing about pattern organization, or synthesis . . . or object recognition Pattern perception serves cognitive ends, which, even in principle, are not fully explainable in these terms. (pp. 63-64)

And Farrell (1977) was similarly critical of Barlow's (1972) identification of the whole of subjective experience with the responses of a certain number of cortical neurons. A human subject's perceptual reaction to a stimulus object is typically not a mere response; a further stage beyond the one that Barlow conceived must be involved: "In this [Barlow] is typical, perhaps, of workers in the field. They do not seem to have taken in that perception is tied to cognition; [and] that the latter involves the acquisition and application of concepts" (Farrell, 1977, p. 356).

Of course, Hebb (1968, 1980) has taken in the tie to cognition. But, in his effort to account for the contents of certain awarenesses by reference to brain events, he was at something of a loss to do more than talk about how central processes develop and are elicited by their normal causes. Such an account, however preliminary and tentative, would be of great scientific value. If psychologists ignore the ordinary concept of that which requires an account in this case, they might well become easily satisfied with Hebb's kind of analysis in terms of causes.

We are perceptually aware, in all cases, that such and such is the case, sometimes correctly and sometimes not. Whenever this happens, there takes place in our nervous system a kind of occurrence that has a content and is

about (or potentially about in the case of hallucinations) something in the stimulating environment. While it is often the case that whatever an awareness is about is a cause of the awareness, this is not always so. Moreover, not all of a particular awareness's causes can ever be included in its content. Discussions of content that restrict themselves to talk about causes must, therefore, miss the difficult point about content, namely, how Hebb's percept, for example, is the percept that it is, with the content that it has.

Consciousness₄

By way of illustrating the use of *consciousness* that I shall consider in this fourth section, the OED offers, quite naturally, a well-known statement from John Locke: "Consciousness is the perception of what passes in a man's own mind." Thomas Reid, too, makes an appearance in the fourth entry, telling us that consciousness₄ is a person's "immediate knowledge" of his or her present thoughts, purposes, and other operations of the mind. As already discussed, the concept of consciousness₃ refers to any awareness of something or any awareness that something is the case; what it is that one is conscious of does not matter to being conscious₃. The concept of consciousness₄ also refers to a class of awarenesses, but that of which one is aware, in this case, does enter into the concept's meaning. The "objects" of consciousness₄ (those things of which one is conscious₄) are of a special kind. They have "a private type of existence" (Dewey, 1906). The person who becomes conscious₄ of one of them has a privileged kind of access to it. He or she is alone in being immediately, or directly, aware of any "object" of consciousness₄. For it is always a mental state or occurrence.

According to the OED's fourth entry, *consciousness* means "the state or faculty of being conscious, as a condition or concomitant of all thought, feeling, and volition; 'the recognition by the thinking subject of its own acts and affections' (Hamilton)."¹¹ With this meaning, Dewey (1906) stated, *consciousness* becomes conceptually identified with the "mind, or soul, or subject, as an underlying condition hypostasized into a substance" (p. 40).¹²

¹¹This concept of consciousness no longer merits the OED's characterization of it as a philosophical sense of the word. This sense has become a familiar one outside philosophy. A more recent dictionary states without qualification that *consciousness* is used to refer to "awareness or perception of an inward psychological or spiritual fact" (*Webster's Third Unabridged*, 1967)

¹²In the corresponding entry for *conscious*, a quotation from John Locke stresses our constant successful monitoring of our own mental episodes: "To be happy or miserable without being conscious of it, seems to me to be utterly inconsistent and impossible." From this statement, Locke (1690/1975) proceeded to claim that the soul must be aware of its own perceptions. The OED compilers found it clarifying to introduce into the very definition of consciousness₄ a quotation that refers to a thinking subject, which is distinct from the human being. Similarly, Dewey's interpretation led him from (a) consciousness qua condition or concomitant of all mental activity to (b) there being, perforce, a special kind of substance that could exercise this much vigilance, or a thinking subject who was omniscient in recognizing all of its acts and affections.

But this putatively constant condition of all thought, feeling, and volition is said by the OED to be a state or faculty; this means *there must be something that passes through the state or someone who exercises the faculty*. Either we ourselves have the capacity for awareness of our mental episodes, or "the thinking subject" that corresponds to each of us has this capacity. The OED definition does not imply that consciousness₄ is equivalent to mind or soul, or even to a subject who is conscious₄.

Lewis (1967) detected in Locke's statements about consciousness₄ the presence still, in a minimal way, of the Latin *conscio*'s together sense. That is, consciousness₄ refers to "myself consciring my thoughts as mine." This element appears explicitly in an example in the fourth entry: "Consciousness, in the most strict and exact Sense of the Word, signifies . . . the Reflex Act by which I know that I think, and that my Thoughts and Actions are my own and not Anothers." What this says is that the exercise of the faculty of consciousness₄ requires that we possess a concept of ourselves wherein we stand in a relation of special ownership to our mental episodes. In being conscious₄, we normally exercise this concept of ourselves; I become aware of a thought in a firsthand direct way and, at the same time, that it is my thought.

It also can occur that I become *directly aware of my own thought but not as mine* (see Landis, 1964). The thought seems to belong to another mind with which I am consciring in a most intimate way, since I am able to know its thoughts as immediately as I know mine. I can share with this other mind both my own thoughts and its own. Normally, however, one has consciousness₄ of facts about oneself as a mind, and that is the way it seems. There occurs, as some would say, recognition by the thinking subject of its acts and affections as its own rather than another's. Privacy, in this case, is not accompanied necessarily by guilt or conspiracy; but a kind of division or doubling of the person is again involved, as in consciousness₂, even where attribution of one's mental occurrences to an invasive mind does not occur. I am again the subject, this time of my mental episodes, and in that capacity may also be the object of my awarenesses. For I am not just aware of a mental episode, but also aware that it is occurring to me.

In the writings of contemporary psychologists, there occurs an avoidable conceptual confusion between consciousness₃ and consciousness₄. A psychologist will argue for a person's lack of awareness of a stimulus on the grounds that the person (a) shows he or she has been affected by the stimulus but (b) cannot describe or otherwise report the stimulus that has affected him or her. An indication of this conceptual confusion sometimes takes the form of shifts in reference between "awareness of the stimulus" and "awareness of having heard (or seen, etc.) the stimulus." Also, the author will draw no distinction between awareness and conscious awareness, *as though it were decided* that any awareness worth the name must be a conscious one. Thus,

Bergmann's (1964) distinction, which shall be described shortly, between a mental state and a conscious (mental) state is not understood or fully appreciated.

Consider, for example, Bindra's (1976) suggestion: "In the normal flow of well-practiced behavior, percepts and images of relevant stimuli [i.e., awarenesses] are seldom formed" (p. 110). Since such awarenesses are not reported under these circumstances (aren't they?), they must not be occurring. It seems that it is essential to consciousness that any percept or image be conscious₄. Bindra qualified the word *percept*, from time to time, with the adjectives *clear* and *specific*, indicating some discomfort with his concept of awareness, as though he had not fully convinced himself that we are not aware of those stimuli to which we habitually respond (i.e., unless we are blocked or interrupted in our response to them). The problems, like this one, into which Bindra and others are led by the assumption that consciousness₄ is a necessary concomitant and condition of consciousness₃, would seem to evaporate when one accepts the proposition that one can be aware without being conscious₄ of one's awareness. For example, there is no need to hold, as I think Bindra would have to, that a child who cannot report his or her awarenesses therefore has none, that is, is behaving without percepts or images. Also, one could hold that awarenesses of the environment do occur when habitual behaviors are produced, but there is less utility in becoming conscious₄ of such awarenesses, as compared to the awarenesses involved when we are uncertain concerning how to respond.

Consciousness₄ has the conceptual effect of turning its "objects" into "states of consciousness" and even into "consciousnesses." As an example of the latter use, the OED provides this quotation: "His [man's] will is not his affections, neither are his affections his thoughts They are separate consciousnesses, living consciousnesses." Thomas Huxley is also quoted for a similar purpose: "We class sensations along with emotions, and volitions, and thoughts under the common head of *states of consciousness*." They are states of consciousness or consciousnesses (or conscious states; see comments below on Bergmann) because of the person's special firsthand mode of becoming aware of them. Huxley pursued his thought saying that we do not know what consciousness is or how states of consciousness are produced. The compilers of the OED were somewhat more dogmatic, for they proposed, in effect, that the thinking subject's "direct recognition" of its acts and affections renders such acts and affections conscious states.

In recent years, Bergmann (e.g., 1964) has made explicit use of the concept of a conscious state. What makes a conscious state conscious for Bergmann? The following is typical of several separate statements by him on this question.

Schematically, a conscious state is an act, e.g. *a* perceiving . . . But it is a conscious state only by virtue of a second act whose intention [object] it is. The second act is not "in" [a part of] the conscious state. Yet this second act can and often does itself become a second conscious state through what psychologists call a shift in set. Every act by virtue of which another act is a conscious state is *a* direct (immediate) acquaintance. (Bergmann, 1964, p. 309)

As do all awarenesses, according to Bergmann (1964), an act of acquaintance has a "propositional character." That is to say, the content of an awareness can be expressed by means of a sentence but not by a single word or phrase; an act of acquaintance (or any awareness) always is an awareness that something is the case (cf. O'Neil, 1958). And an awareness has its specific intention because of its propositional character. Within "one specious present," a shift between a mental episode and the act of acquaintance with it that makes it conscious may and often does occur. It is "the very nature of consciousness," in Bergmann's view, that there be this additional act by which an act of perceiving or any other mental act becomes conscious. An act of perceiving is not a conscious state simply because it has an intention (i.e., an intentional object) such as a chair; the act itself must be the intention of a further act of awareness.

Note also that, for Bergmann, the act of acquaintance with a mental state can itself become a conscious state; this requires a further awareness that has as its intention the first act of acquaintance. Frequently, however, we do not become aware that we are aware of an act of perceiving; we do not, as it were, introspect our introspections. On those occasions that we do, I want to emphasize, it is *not as though we managed somehow to perceive* our first act of acquaintance, and were in a position to tell others its nature over and above its particular content. All that occurs is *a further awareness of an abstract conceptual sort* that refers to the first awareness. Hebb (1968, 1969) should have realized that it is not the imagery generated by the metaphor of introspection (inward looking) that Bergmann and others meant when they referred to consciousness.⁴ The presence of imagery is extraneous to the mind's immediate awareness of some of its own occurrences and should not have dissuaded Hebb from his belief in our ability to know in some regards our mind in a privileged way. All that Hebb could have discovered by introspecting his introspections, which he attempted, was the occurrence of acts with propositional character in Bergmann's sense. Such acts are what make mental states conscious—not the imagery described by Hebb. Lowered expectations might have saved Hebb from rejecting, as he has, all ways by which a mind might know itself directly.

The latter is not an exaggeration of Hebb's view; nor is it based on my drawing out the hidden implications of the view. Hebb (1977) explicitly stated that "direct self-knowledge by the mind, the immediate awareness of its own content or activity" simply does not exist. In all instances of being aware of some mental activity, according to his alternative view, we infer its occurrence

from sensory or quasisensory (i.e., imaginal) observation.¹³ In the light of this claim, I want to closely examine Hebb's (1968, 1969) own example of introspecting his introspections. Beyond that, I shall not pursue criticism of his view, due to a lack of space and a desire that the present article not give more attention to one of the six concepts of consciousness than to the others.

When certain theoretical difficulties concerning introspection came to Hebb's (1968) attention, he decided to "look at the process critically"; whereupon he performed a certain mental action, namely, setting himself to introspect his mind's workings and to take note, as best he could, of whatever was involved in his introspection. Mental actions, such as adopting a certain mental set, are not behaviors, which one might observe by sensory means; therefore, I must raise at once the question of how Hebb knew that he had performed the particular mental action that I have mentioned. Hebb's theory requires that he knew by a process of inference from something he observed. What might this something be? A reasonable candidate, though not exactly for "observation," is a thought (T) that might be expressed as follows. "I shall now introspect and try to determine what happens in my mind when I do."

However, in order for Hebb to draw an inference from T, he would have to note its occurrence to him. Without such "noting," T could not serve as the premise Hebb needs. It is *by reason of* T's occurrence to him, that he can infer his adoption of the respective mental set. In other words, his reasoning must include some such step as "Because I just had thought T, I have adopted the mental set to which T adverts." The obvious next question is how Hebb became aware of the thought (T or the like) from which he could draw the relevant inference. Hebb's theory requires, again, that he became aware of the thought not directly (i.e., through its evoking an awareness of it; cf. Bergmann, 1964, discussed above) but by an inference from something else that Hebb could observe in a more or less sensory way. On the basis of what observation, then, did Hebb infer the fact of his thought's occurrence to him? A Hebbian possibility is that he "heard" (in his mind's ear) the words *I shall now introspect and try to note what happens in my mind when I do*.

However, Hebb's merely "hearing" the words could not be the basis of his inference. To infer from them the occurrence of the respective thought, he would have to become aware that he "heard" them. His reasoning must have included the following sort of step. "Because, I 'hear' the words *I shall now*

¹³Since the present article is primarily a discussion of concepts of consciousness, perhaps I should leave the matter here, rather than contest Hebb's theoretical position on consciousness. But his position is negative in so far-reaching a way that it denies the applicability of the concept of consciousness_s to anything at all. Hebb has been suggesting, in effect, that all those such as Bergmann who treat of consciousness_s and try to develop a suitable concept or explanation are wasting their time. I think that I am justified, therefore, in concluding the above section by showing how implausible Hebb's thesis is. By doing so, I defend the utility of the concept of consciousness_s or a similar, scientific concept.

introspect . . . , I must be having a thought to the same effect." Therefore, Hebb again requires a process of inference, by which he would know that he "heard" the words. But, to know that one "heard" them, one would have to infer it from something one observed. How did Hebb become aware that he had "heard" the words? To avoid misunderstanding my point, please note the following. I do not mean to ask (a) how Hebb knew that he had "heard" (imagined) the words rather than heard (perceived) them. Nor do I mean to ask (b) how Hebb knew it was he and not someone else who "heard" the words. And I do not mean to ask (c) how Hebb knew he had "heard" these words and not some others. I am asking *how Hebb knew this experience, however he might characterize it, had taken place*. Hebb appears to have no answer to this question, a question crucial to the plausibility of his inferential account; his inferential account is unable to encompass this example of the mind's self-knowledge.

Having adopted the mental set, Hebb (1968) discovered that this produced certain imagery including, as he stated, "a pair of eyes with the upper front of the face (*my eyes and face*) somehow embedded in the back of a head (*my head*) looking forward into the sort of gray cavern Ryle (1949) has talked about" (p. 476). I do not doubt that Hebb had this imagery (though he said he is no longer able to report on it in detail), but I do wonder what he would say if someone asked him how he knew of its occurrence to him. His theory requires that he inferred its occurrence from having observed something else, since we cannot observe our own mental processes including those involved in imaginal awareness. My question is not how he knew he was having an experience of imagery rather than a perceptual one (i.e., how he knew it was all fantasy). Rather, the theoretical problem is how he knew he was having any kind of visual awareness. From what did he infer what was going on in his mind at that moment when he was imagining the gray cavern and so on? The only Hebbian candidate here would seem to be *the illusory imagined objects themselves*. He was imaginably aware of them, and inferred that he was having imaginal awarenesses of them.

However, this inference is more easily alluded to than spelled out in a way consistent with Hebb's general analysis. What did Hebb notice about that illusory gray cavern, from which he could infer that he was having imaginal awarenesses of it? Suppose Hebb responds by referring to something unreal about the cavern's appearance or by referring to something about his knowledge that rules out the reality of such content. What follows for those instances where what I imagine is neither strange or bizarre? From Hebb's vantage point, would I not be able to infer that I am aware of it? From what do I infer that I am having imaginal (or perceptual) awarenesses of a red ball? I do not mean how do I infer that it is not (or is) actually there before me. But, more simply, from what do I infer that I am having any awareness of a ball at

all? Surely not from its roundness or from its redness. *The fact that it is round or that it is red says nothing about my being aware of the ball*; it represents nothing more than the ball's own characteristics. Awareness of the latter cannot be the basis of inference to something about myself. I would have to be aware that I am aware of the ball to start a line of inference.

Consciousness₅

Consciousness₅ is a certain set of a person's mental occurrences and states. According to the fifth OED entry for *consciousness*, the word in one of its uses designates "the totality of the impressions, thoughts, and feelings, which make up a person's conscious being." The OED's compilers thought this meaning of the word was implied in the following sentence from John Locke. "If the same consciousness can be transferr'd from one thinking Substance to another, it will be possible that two thinking Substances may make but one Person."¹⁴ Is the OED suggesting, by its selection of this quotation, that *the whole set* of a person's mental episodes would have to be "transferr'd," in order for the same consciousness₅ to characterize both thinking substances? Or, could a portion of the whole set suffice to hypothetically produce the same person a second time? *What set of impressions, thoughts, and feelings make up a person's conscious being?* And what is it for a set of mental episodes to comprise a person's conscious being?

Contrary to Dewey (1906), I argued in the previous section that the concept of consciousness₄ does not have a kind of substance as its putative referent. Similarly, Locke (1690/1975) held that consciousness₅ is not the equivalent of the mind or soul. He distinguished (a) the totality referred to by the concept of consciousness that I am considering in this fifth section, from (b) the corresponding thinking substance, to which those impressions, thoughts, and feelings occur. One's conscious being could be transferred (conceptually) to another thinking substance; therefore, it could not be, itself, an immaterial (or material) substance.

According to Locke, consciousness₅ is a totality of mental episodes whose unifying principle—by which they form a particular totality—is their common appropriation by a "thinking intelligent being, that has reason and reflection, and can consider it self as it self, the same thinking thing in different times and places" (Locke, 1690/1975, p. 355). The functioning of a thinking

¹⁴As one reads Locke's sentence, examples of a science-fiction sort soon come to mind. For example, space travel might consist of reconstituting human beings from fresh materials by means of information radioed to a location extremely far in outer space. Of course, Locke had nothing like this in mind; his statement was an attempt to make certain of his basic theoretical notions clear. For example, the hypothetical transferral of "the same consciousness" would modify the recipient thinking substance so that it was the same as the donor thinking substance insofar as the latter's history of mental episodes had modified it.

substance is such that it constitutes its conscious being out of the totality of its impressions, thoughts, and feelings. The recipient thinking substance, to which the same consciousness_s is hypothetically transferred, would become the same person as the donor thinking substance because it could (a) recall the latter's previous experiences equally as well as the donor substance manages to recall them. Also, the recipient thinking substance would now (b) represent as its own the same totality of mental episodes that the donor substance represented as its own. That is, both *recall and appropriation to oneself* are necessary in order for a collection of mental episodes to constitute one's conscious being. Therefore, a hypothetical transferral of consciousness_s would have to be attended by "the same consciousness" in another sense, namely, the process basic to Locke's principle of unification.¹⁵

One's conscious being cannot be, as it were, all of one's mental being. For, would it be at all useful to count as part of a person's conscious being those of the person's earlier experiences that he or she could not recall (soon after they occurred and ever since)? Also, Locke's appropriated set of mental episodes could not be all of any person's impressions, thoughts, and feelings. Most of these are forgotten. We all suffer from a massive amnesia for the large majority of our past experiences. For that reason alone, a person's present conscious being must consist of a restricted set of them. One might think, therefore, that the concept of consciousness_s must refer to the totality that the person can recall as his or her own. But there is a further complication, which is made evident by one of the examples of usage in the OED's fifth entry for *consciousness*.

A person can fail to identify with a past experience, as though he or she were not the one who actually had the experience. The person remembers the experience without fully acknowledging it as his or her own. There is something about it or about how it is recalled that alienates it from one's conscious being. In a poem, William Wordsworth wrote, in effect, of two different consciousnesses_s, each corresponding to a different part of his life: "Musing on them, often do I seem Two consciousnesses, conscious of myself, And of

¹⁵From the perspective of ordinary discourse, it is conceptually as it should be that a unifying principle be involved, namely, one that determines which totality of impressions, thoughts, and feelings comprise a person's conscious being. A subsidiary part of the OED's fifth entry for *consciousness* suggests this. We are told therein that the fifth meaning of the word can be "limited by a qualifying epithet to a special field, as the *moral* or *religious consciousness*." These do not seem to be mere subsets of the person's grand totality. Especially with respect to moral consciousness, there would seem to be a principle of unity at work that is more than the possession of a common theme by a collection of mental episodes. There is a point of view and an internal structure to one's moral consciousness. And some elements that might be included may be excluded due to their inconsistency with that point of view. For example, one judges an action right, at a weak moment, that one would normally judge wrong. One thus passes a moral judgment on one's action, but the judgment betrays one's moral consciousness. Similarly, some principles of selection and organization must characterize consciousness_s unrestricted by an epithet.

some other Being." Though he knew they were his, he could recall early experiences that no longer seemed to belong to him. In such instances, the limiting factor on consciousness₅ has to do, apparently, with *the process of appropriating, which involves more than knowing that the past experience occurred to one.*

That the problem may lie with the means of appropriation is suggested by the possible alienation of present mental episodes as well—even as one experiences them. For more time or less, one may fail to identify with one or more of one's present mental functions. This is a phenomenon psychiatrists have noted not infrequently:

Every psychic manifestation, whether perception, bodily sensation, memory, idea, thought or feeling carries [the] *particular aspect of "being mine,"* of having an "I"-quality, of "personally belonging," of its being one's own doing. We have termed this "*personalisation.*" If these psychic manifestations occur with the awareness of their not being mine, of being alien, automatic, independent, arriving from elsewhere, we term them phenomena of "*depersonalisation.*" (Jaspers, 1959/1963, p. 121)

As mentioned in the previous section, consciousness₄ normally involves the exercise of a concept of oneself as the one who "owns" one's mental episodes. (An alternative concept is the concept of one's "I," as we shall see almost immediately.) However, we are not immune from errors of misidentification relative to first-person pronouns; that is, it can also happen that in being conscious₄ of one's mental episodes, one commits the error of ascribing them to a subject other than oneself. The mental episodes in respect to which one is "depersonalized" may be delusionally attributed by the person to an invasive foreign agent. Though the person is aware of their occurrence noninferentially, it does not follow that they are claimed as his or her own.¹⁶

Not inaccurately, though in my view optionally, some psychologists would consider the fifth OED entry's reference to the person's conscious being to be a reference to the person's "I," self, or ego. They would take the concept of consciousness₅ to entail the existence of a Subject that is the unique source of

¹⁶Reed (1972) has usefully described many anomalies in the experience of self, among them a dissociative reaction called "ego-splitting." In the case of this anomaly, one feels as though one were observing oneself from a third-person perspective, that one is "outside oneself," and is not the subject of, or a participant in, the activities, mental and physical, of the person who one is. In his fascinating compendium of the varieties of psychopathological experience, Landis (1964) returned repeatedly to something called "the EDITOR process." This humanlike entity seems to the person to be part of his or her mind and to perform certain (editorial) functions. But often, it can only stand by, as it were, and "watch" the person's mental life hurl uncontrollably by. Federn (1952) defined "depersonalization" as "the subjective experience of the disruption of one's ego" (p. 243). Suffering this apparent disruption, a patient may have the strong, unshakable conviction that he or she cannot think, breathe, stand, walk, move his or her hands, or love or hate. The patient's daily activities and mental occurrences proceed as though on their own initiative. Yet they do proceed and often quite normally, and the patient is aware of this and finds it difficult to explain the sense in which it is not he or she who experiences such activities.

the totality of impressions, thoughts, and feelings that comprise a person's consciousness₅. The "I" is that which perceives, knows, thinks, remembers, feels, wants, wills and so forth (cf. the quotation below from Humphrey, 1980). This understanding of the concept of consciousness₅ explains something I have not yet mentioned about the fifth entry: In the plural, *consciousness* was said to be equivalent to *conscious personalities*. On its own, the word *personality* would refer, of course, to an organization of traits, attitudes, and the like. The notion of a "conscious" personality, however, implicates some sort of a conscious origin of actions, emotions, and other mental occurrences. Consistently, the most recent example of use included in the fifth OED entry interprets consciousness₅ as different from any kind of totality: "From our innermost consciousness, a voice is heard, clothed with native authority . . . 'I feel. I think. I will. I am.'" This native authority derives from the supposed fact that it is our innermost consciousness (our personal "I") that feels, thinks, and wills, self-consciously, and thereby knows that it exists. Contrary to Locke, consciousness₅ becomes equivalent to something like an entity, whose transferral to another thinking substance would be absurd.

Recently, and unexpectedly, two experimental psychologists have revealed an interest in the "I" who is aware:

When I reflect on my own behaviour I become aware not only of external facts about my actions but of a conscious presence, "I," which "wills" those actions. Thus "I" has *reasons* for the things it wills. The reasons are various kinds of "feeling"—"sensations," "emotions," "memories," "desires." "'I' want to eat because 'I' am hungry," "'I' intend to go to bed because 'I' am tired," "'I' refuse to move because 'I' am in pain." (Humphrey, 1980, p. 61)

Everyone has the experience of a conscious self: of thinking, feeling and willing, privately, in a way that is continuous and coherent over time. Who knows what I am thinking of now, or what it means to me? I know; I am conscious of it. The study of consciousness is surely among psychology's chief responsibilities. (Neisser, 1979, p. 99)

When Neisser wrote that all of us have the experience of a conscious self, he was very likely referring to some people's *strong immediate impression or conviction* that all of their conscious₄ mental episodes have a Subject who is not identical with the human being that they are. Some psychologists also identify consciousness₅ with the mental activities of an actual Subject. On grounds such as Humphrey's in the above quotation, they feel impelled to hypostatize an inner self or conscious center. Thinking, feeling, willing in a way that seems continuous and coherent over time, they make sense of it in terms of a spurious theoretical entity—of whose existence they claim to have firsthand evidence.¹⁷

¹⁷The theoretical introduction of a native source distinct from the human being can be seen in another use of the word *consciousness*, which the OED includes in a subsidiary part of the fifth

With some care, the concept of consciousness_s can also be applied without the implication of an actual innermost source. The implicit reference to "I" would be understood as a reference to how a person's mental occurrences seem to him or her. They can seem as though they belonged to an inner self or ego. A sufficient number of authors have reported forming this immediate conviction that it is pointless to contest by comparison with one's own experience the strong impression that these authors develop. But an explanation of this conviction is possible that does not accept the ontological reality of "I." Given an adequate explanation, our concept of consciousness_s could be disambiguated regarding its reference to a person's conscious being.

Certain results of Globus's (1980) recent defense of "I" are typical, and hold the key to an explanation that does not postulate an inner self or conscious center. A person can be directly aware of his or her own "I," according to Globus; in fact, it is "the most persistent and prominent feature of mental life" (p. 418). Rather than treat it as an illusion in the company of other authors (e.g., Ryle, 1949), we should take at "face value" the "I" of ordinary life and experience. In Globus's view, that is, a significant degree of validity should be assigned to our frequent reports of having or being an "I" (cf. Humphrey's "I" qua "conscious presence" in the above quotation).¹⁸

But what do Globus's immediate encounters with his "I" reveal about it? It turns out (as it has before) that "I" is not something that can be observed in any sensory or quasisensory way. Globus discovered that his "I" has no "worldly analytical properties," at least none of which he could become

entry. This concept has reference to a "collective faculty" that one attributes to "an aggregate of men, a people, etc., so far as they think or feel in common." Of course, this communality may be naturalistically explained. The members of the social aggregate share the conditions of life; consequently, they share ways of thinking and feeling about the world, other people, and themselves. Alternatively, the aggregate's consciousness may be explained in terms of a suprapersonal conscious center from which the members of the aggregate all draw. It may be explained, that is, in terms of a universal Self. Understandably, innermost consciousness is held to speak with especial authority when it is part of such a Self. An author quoted in the fifth OED entry had a suprapersonal Subject of consciousness in mind when he stated, "Those many Consciousnesses must be as the Constituent Parts of that one Individual Consciousness." In this sentence, two concepts of consciousness are applied, the first concerning the totalities of mental episodes that each makes up, respectively, the conscious being of a different person; the second concept is applied to a grand totality that includes them all (and perhaps more). The particular consciousnesses (conscious personalities) are integrated into the larger whole, and they depend on the latter for at least some of their characteristics.

¹⁸As regards ordinary experience, my own view is more critical. I believe that a person's beliefs about his or her psychological functioning (i.e., his or her theory of the mind) may well require explanation for certain scientific purposes. But these beliefs need be taken at face value, and at most, only provisionally—depending on broader considerations. Sellars (1980) well stated the skeptical attitude we should take towards the first-person perspective on mental occurrences:

Introspection is not a simple transposition of psychological reality into the cognitive order; a direct apprehension of the facts as they are. It is a *conceptual* response to psychological states and the concepts included in this response are common sense psychological concepts and, as such, no more adequate to an understanding of what is really going on than are common sense concepts pertaining to the middle sized physical objects of everyday experience. (p. 4)

directly aware. The implications for Humphrey's (1980) experience of a conscious self, for example, are as follows. This experience is not like his experience of parts of his body or even like his experience of an imaginary dragon whose flaming breath seems to roar out at him. The feeling Humphrey has of a "conscious presence" is no more than a presentiment. It is no more than an evoked occurrent belief to the effect that there is an "I" there and open to his direct awareness; for "I" is supposed to be thus available. In Humphrey's direct awareness of "I," there occurs *a conceptual response* that includes the exercise of a concept of "I" which for many people is not the concept of a certain human being, but the concept of something in an occult position of special ownership of their mental episodes. Humphrey's "I"-awarenesses, some of which he listed in the quoted paragraph above, are *immediately (as opposed to inferentially) evoked "I"-thoughts that would refer to "I" if only it existed*. They represent "I" (I should say: they would represent "I") purely conceptually, which is why Globus was willing to say that his "I" does not participate in a structure of spatiotemporal relations and corresponds to a point without extension. In the absence of any empiricist grounds for "I," other persuasive reasons for its postulation are needed, but they have not been forthcoming.

I believe that it is fair to say that, after all his protestations on behalf of "I," Globus, too, considered "I" as Subject to be a delusion, though he clearly did not count it an egregious one. In fact, he might have opened his discussion of what "I" is, about half-way through the article, with a ringing declaration that "I" as Subject does not exist, in view of what he proceeded to do with the concept of "I." For he proposed, finally, to identify "I" with certain activities that are attributed to "I" as Subject, but which properly belong to the human being. "I" was said to be no more than the human being's "distinction-making actions." In this way, "I" faded from Globus's framework, as his argument proceeded. For it was "strictly identified" with (replaced by) a human being's "actions of distinguishing" by which he or she is supposed to constitute a meaningful world.

If there is no inner self or "I," to what do people's introspective "I"-reports and "I"-awarenesses refer? There are two answers; people do not appear to be of the same mind in this regard. (a) Those awarenesses that occur to, and those reports that are issued by, people who are deeply convinced of having an "I," or being an "I" that is not the human being that they are, *do not refer to anything* by means of their concept of "I" in the introspective context. Theirs is a failed reference. They would refer to "I" if only "I" existed. An act of reference need not always succeed. It does not have a referent simply because it is an act of reference. Nevertheless, such reports and awarenesses have other characteristics of some of their counterparts that do succeed in referring. Among these characteristics is the production of a strong conviction to the

effect that one has made firsthand contact with the supposed referent. (b) When other people use the word *I* in this context (and other contexts), or when they are directly aware of the occurrence to them of a thought or the like, they make reference to *this human being*, that is, to the human being that they are. Coulter (1979) fits into this category, when he states for himself and others,

I am not aware, even retrospectively, of an "I" within myself that . . . generated my course of action; I only know/believe that I did something, where my use of "I" is a speaker-specifying, self-ascriptive device or token and not the name of an entity, mental or otherwise, interior to me. (p. 113; cf. Ryle, 1949, p. 188)

However, Malcolm (1979) argued that *I* is never a referring expression. It does not even refer to this human being that I am, because in a condition of "sensory deprivation" (a hypothetical condition, actually, of complete sensory anesthesia) (a) one could still have the thought "I am in a strange condition" and (b) the statement "Perhaps I am bodiless" is not incoherent. That is, one could still make use of *I*. In making this argument, what Malcolm did not realize is that under his hypothetical condition there would still be something to which *I* could "latch on" (assuming with Malcolm that this is necessary for successful reference). Malcolm's condition allowed for the continued occurrence of thoughts. The person in "sensory deprivation" would have thoughts and perhaps certain other kinds of mental occurrences of which he or she would be directly aware as occurring to him or her. And the statement "Perhaps I am bodiless" is indeed not incoherent. What I am asking is whether I should consider only that of which I am now aware to constitute me. Should there be a change in what *I* means, in view of my evident continued existence in the sensory absence of my body? I suppose that most people would remind themselves of the temporariness of the anesthesia they are suffering, and that they have not lost, actually, any part of themselves.

The reason that "sensory deprivation" would not eliminate my self-reference in the use of *I* is that my noninferential self-awarenesses may be evoked either by my mental activities, by interoceptive stimulation from my body, or by exteroceptive stimulation affected by my body. So long as mental activity continues, self-awarenesses can be produced, and since such awarenesses include the exercise of a self-concept, I can continue to refer to myself.

Consciousness₆

When we make such statements as "The patient is conscious," or "A blow to the head may remove all consciousness," we use the words *conscious* and *consciousness* absolutely. That is, we do not relate the concept to a content, in this use, as we do in applying the concept of consciousness₃. In their absolute

use, *consciousness* and *conscious* finally represent, Lewis (1967) thought, the weakened sense of the Latin *conscio* without qualification. Whether Lewis was correct in this regard, about the English meaning, depends on what we commonly think is the case when we say that someone regained consciousness. To what do we refer or mean to refer, when we exercise the sixth and last concept of consciousness that the OED presents?¹⁹

In the sixth OED entry, consciousness is said to be "the state of being conscious regarded as the normal condition of healthy waking life." The illustrative examples of this use of *consciousness*, which date from only 1837 on, consistently speak of a certain general state or condition of the person. The person loses or returns to consciousness₆—a consciousness that is the equivalent of "mental life" or "the mind's wakeful activity." Also, this general state of consciousness called consciousness is contrasted with other general states of consciousness and unconsciousness, including torpor, insensibility, dormancy, dreamless sleep, and swoon. Bunge (1980) warned that to speak literally of "states of consciousness" would be a reification because the phrase implies that consciousness is an entity that passes through different states. Rather, it is the person that is conscious₆, or in a state of consciousness₆, or in a different general state of consciousness such as torpor. Consciousness₆ is not an entity and does not experience different states.

The sense of *consciousness* that I am discussing in this sixth section seems to be the latest sense of the word to enter the English language. (It is not perhaps the latest sense of *conscious*, since we began about the same time, according to the OED's examples of use, to write of "conscious actions" and the "conscious agents" of those actions.) Dewey (1906) characterized the concept of being conscious₆ as the one that "underlies the psychological use of the term," which was, of course, a nineteenth-century development. He believed that the concept of consciousness₆ provided psychology with a standpoint from which certain undesirable logical and metaphysical implications could be avoided. He mentioned specifically two things in this connection: (a) "the logical implications of the 'awareness' problem in general" and (b) the many metaphysical problems begged by use of the concept of consciousness₄.

I cannot tell from Dewey's brief remarks what he meant by the first of these; unless it is related to a point I implied in the third main section of this article: There is a problem of accounting for the contents of awareness from within a naturalistic (i.e., a nonintentionalistic) framework. The logic of awareness and its physical nature are not easily unified into a single consistent system. As for the metaphysical problems with the concept of consciousness₄, these arise insofar as the theorist takes our ability to be directly aware of some of our

¹⁹I should mention that the last entry under *consciousness* in the OED actually defines *double consciousness*, and does not pretend to deal with as basic a concept as the rest. *Double consciousness* is implicitly defined in terms of the concept of consciousness.

mental occurrences to require a special entity or subject to which its activities are perfectly evident. In the section on consciousness₄, I pointed out that consciousness₄, qua purported condition or concomitant of all thought, feeling, and volition, is also described by the OED as a faculty or state. In my view, it is a capacity of or occurrence in a person and, therefore, includes errors and omissions, and presents no special metaphysical problems.

Consistent with Dewey's statement on the relevance of the concept of consciousness₆ to psychology, the concept recalls Hebb's (1972) characterization of consciousness₆: "the state of being awake and responsive or the state of the brain's activity at such a time" (p. 248). Compare this with the OED's corresponding entry for *conscious*: "having one's mental faculties actually in an active and waking state." A person or higher animal is conscious₆, according to Hebb (1972), if the person or animal is in a "normal waking state and responsive to his environment" (p. 248). That this concept of consciousness underlies the psychological use of the term was also suggested in Hebb's (1978) criticism of a biological scientist (Griffin, 1978), for being unfamiliar with the line of thought in comparative psychology that provides us with objective, behavioral meanings of terms like *consciousness*. Griffin had erred by appealing to self-awareness and resorting to the commonsense definitions of a nontechnical dictionary, according to Hebb, who thereupon referred to his own previous discussions of the topic as having taken advantage of psychology's progress toward objectivity.

However, what Hebb has lately made out of consciousness₆, working in this tradition, is not reassuring, and has the effect of weakening his criticism of Griffin. Hebb's (1949, 1972) description of consciousness₆ was developed by him into an identification of this general state with the occurrence of thought processes in the brain. In his latest book (Hebb, 1980), this *displacement of reference* became especially evident. The usual preliminary considerations of consciousness₆ as a general state were omitted. The "variable state" of consciousness was now simply "a present activity of thought processes in some form" (p. 3). *Consciousness is a kind of brain activity that occurs in the absence of the thing thought about* (cf. Jaynes, 1976). I doubt this could suffice for Griffin's purposes, which pertained to an understanding of animal awareness in a more general sense. And I know that Hebb's reduction of consciousness₆ to mere thought in absence does nothing to recommend his approach over the kind of broadly biological approach to which the OED's sixth entry points.

In being conscious₆, one is "mentally alive or awake," though not necessarily in reference to any particular kind of thing. As already mentioned, particular instances of consciousness₆ are not identified in terms of that to which one is mentally alive while in the state. For example, one may find oneself rich and free, upon awakening from a long fevered sleep, but *the state makes finding out possible and cannot be considered equivalent to the awarenesses involved*. "Within" a particular state of consciousness₆ that lasts for some

time, one experiences a wide variety of mental episodes; thoughts, feelings, emotions, and so on, occur to one while one is in the state. None of these occurrences are instances of consciousness₆, and so to move, as Hebb (1980) did, to consciousness as thinking about something in its absence is, quite clearly, to *leave behind* the general state that serves as a condition under which thought takes place. In fact, the kind of thoughts Hebb had in mind occur to people in other general states of consciousness as well. *Not only are thoughts in absence not equivalent to consciousness₆, this general state is not a necessary condition for their occurrence.*

It is reductionistic in a negative sense to identify a general state with one of the things that occur while one is in it. White (1964) correctly refused to make this identification. He clearly distinguished, in effect, the concept of consciousness₃ from the concept of consciousness₆: "Being conscious or unconscious of so and so is not the same as simply being conscious or unconscious;" where to be conscious of something is "to have it before one's mind in perception, feeling, or thought" (p. 59). To lose consciousness₆, as we do when we fall asleep, does not require that all instances of consciousness₃ become impossible. During sleep, there occur dream awarenesses, and thoughts occupy us for much of the time while we sleep when we are not actually dreaming. Unfortunately, White did not grasp this point; instead, he linked being conscious₆ with consciousness₃ in the following way. A loss of consciousness₆ requires, in his view, the absence of consciousness₃: "If there is anything of which a man is conscious, it follows that he is conscious [in the absolute sense]" (White, 1964, p. 59). Consider, however, the case of people who report upon being awakened from sleep that they were not sleeping; they were lying there thinking, they say, in the way that they do when awake.

Contemporary psychologists will find the concept of consciousness₆ to be the one most compatible with their view of human nature. With the sixth use, the word *consciousness* begins to have a good amount of biological connotation. References appear in the respective entry to being awake and alive, to normality and health, and to being in a position to make an improved adaptation to the world. A quotation to the point starts off the OED's series of examples: "When the fever left him, and consciousness returned, he awoke to find himself rich and free." And Alexander Bain contrasts consciousness qua mental life with the loss of consciousness, or "mental extinction." Moreover, the "altered states," with which the general state of consciousness₆ is so frequently contrasted, are states that typically make one less responsive to the world, or at least less able to deal with it adaptively.

In their attempts to spell out either the concept of consciousness₆ or a concept of consciousness closely related to it, some authors have emphasized a *general attitude or posture to the world* that ties in nicely with consciousness₆'s biological function:

By the term "*wide-awakeness*" we want to denote a plane of consciousness of highest tension originating in an attitude of full attention to life and its requirements. Only the performing and especially the working self is fully interested in life and, hence, wide-awake. It lives within its acts and its attention is exclusively directed to carrying its project into effect, to executing its plan. . . . The concept of wide-awakeness reveals the starting point for a legitimate pragmatic interpretation of our cognitive life. The state of full awakensness of the working self traces out the segment of the world which is pragmatically relevant, and these relevances determine the form and content of our stream of thoughts. (Schutz, 1945/1962, p. 213)

The wakeful mind, even though it may discern nothing, listens for the truth of the outer world. The true nature of the outer world is its ultimate commitment, its unflinching and genuine concern, and this consists in a blind submission to the rational determination of mental contents by the world. The mind bows down before reality. All one's cognitive attitudes aim to conform to the one great and unique archetype: the world. (O'Shaughnessy, 1972, p. 42)

There is good biological reason for the existence of the normal waking state. In Schutz and O'Shaughnessy's terms, it is a general state of full interest in life and life's requirements, including a concern for how the outer world actually is, i.e., the truth about the world. Therefore, it is a major theoretical error to treat consciousness, as some authors do, as though it were one of a group of equally important states and not really essential, one that we might manage without. In contrast, common sense and ordinary discourse acknowledge the state's unique biological importance. From that perspective, it is *the* state of consciousness, called consciousness; and other general states are seen as departures, alterations, or aberrations from it. It is no less than the normal waking state, out of which we find our way *in the world*.

In helping us to grasp and to develop a concept, a vivid instance is often useful to which the concept is applicable. In the above quotation, Schutz (1945/1962) spoke of a plane (or state) of consciousness that he called "*wide-awakeness*." He described this state as being "of highest tension," and as characterizing a person who is performing, or carrying out a project. Schachtel (1973) described the normal waking state of an obsessional person in terms that seem entirely congruent with Schutz's more general characterization:

The obsessive personality tends to be constantly on his toes, hyperalert, always watching out for something. The battle he has to be prepared for at all times is not only a battle against his own thoughts and feelings but a battle on two fronts: the other person, the environment, is one; his own person is the other. In relation to others he has to be ready to avoid any danger from the world outside and to parry, like a fencer in a duel, any possible attack from others and to detect any fault or mistake in them; but he must be equally or even more on the alert and watchful about himself, about any fault or mistake in himself, about what he says or does or is, or hopes or fears he is. (p. 45)

Such a person's overarching project, in the service of which he is so much of the time engaged in the world, is founded upon a conception of the world as a place of pervasive precariousness for him. He is in a state of constant doubt about it, particularly about his relations to other people. O'Shaughnessy's

characterization of consciousness₆ as a vigilant attitude finds resonance in Schachtel's (1973) description of the obsessive person as one "who can rarely look at something but is usually constrained to look for something, because he feels endangered in so many situations in life" (p. 47). He finds it very difficult to suspend what amounts to his life's project in order to contemplate an aspect of the world. The obsessional person's state of "wide-awakeness" is an exaggeration or caricature of the general state of consciousness₆ as it normally occurs; but the obsessional person's posture captures rather well the state's commitment to life and its requirements and to the true nature of the outer world.

However, we need to know more exactly what the characteristic posture or attitude consists of that is supposed to distinguish the general state of consciousness₆ from other general states. To begin with one is not disinterested; there is, first of all, some state of affairs that one wants to bring about or to avoid. One must therefore adopt a certain kind of cognitive attitude. O'Shaughnessy (1972) called the characteristic cognitive attitude of consciousness₆ "the correct occurrent epistemological posture." This was said to consist of a "blind submission to the rational determination of one's mental contents by the world" (p. 42). Similarly, Schutz (1945/1962) wrote of the *epoché* of the natural attitude, which requires suspension of all doubt concerning the outer world's reality; that is, one takes the latter for granted along with its fundamental dimensions. This is an adopted attitude, according to Schutz, something that we bring about rather than a state that simply comes over us: "This attention [i.e., this attitude of full attention to life and its requirements] is an active, not a passive one. Passive attention is the opposite to full awakeness" (p. 213).

Though there is suspension of doubt, or a "blind submission" in O'Shaughnessy's (1972) terms, it is not such as to make the determination of one's mental contents nonrational. Particular awarenesses of the world while one is "wide-awake" can be invalidated by these awarenesses' incompatibility with other awarenesses or with one's stock of knowledge. In the correct occurrent epistemological posture, one is not immersed in the world, as animals are. We transcend animal-immersion by means of our capacity to think in terms of what is hypothetical and possible:

To know that *p*, I must reject the possible match of the denial-thought (*not-p*) and reality, I must know that *not-p* might have been true but is in fact false; and animal-immersion is marked by the absence of this knowledge. For example, a dog's knowing it is to be fed does not involve its knowing it is false [that] it is not to be fed. (O'Shaughnessy, 1972, p. 38)

For us to be conscious₆, our minds must be in a particular operating mode, different from the operating modes of general states of immersion in the world. While in the correct occurrent epistemological posture, we do not

simply respond to the "evidence of our senses." *We are in a position, or frame of mind, to treat it as evidence.* We are, therefore, prepared to accept or to reject it. This goes also for the inferences we draw about the world. An important implication of this view of consciousness₆ is that the state places us not only in opposition to the world, but also over against our own mental contents. These may be true or false or partly true and partly false, and, being conscious₆, what they are in this regard is of prime importance to us.

Conclusion

In this final section, I want to interrelate the various concepts of consciousness that I have discussed in the previous sections. I shall do this in terms of several dimensions of meaning with respect to which the six main concepts can be compared. I shall include a large number of the more important relations among the six concepts and some of the concepts proposed by the authors mentioned above. My procedure here may be viewed as a somewhat extended process of thought which exercises the concepts of special interest in order to bring them under more conscious control. Having considered the concepts closely and made some intensive use of them, we may hope to put them to effective use in the future without awkwardness and ambiguity.

The Intersubjectivity Dimension

The concept of *consciousness*₂ is an extension of the social concept of consciousness; it implies that a person can, in a sense, share knowledge about his or her doings with himself or herself. In being conscious₂, there occurs a kind of cognitive relation with oneself: (a) One has knowledge of an action or series of actions, as part and parcel of performing them; and (b) one shares this knowledge with oneself—by witnessing the actions, by recalling them to oneself, or by characterizing oneself in light of them. Thus, one plays both roles that are involved in many applications of the concept of *consciousness*₁. The latter concept was very often used to refer to a cognitive relation between two people in which one person was the witness or confidant of the other with respect to particular actions of the latter.

In contrast to the first two concepts, the concept of *consciousness*₃ appears to be free of the intersubjectivity requirement and of its intrapersonal derivative. That is, it seems to correspond to the Latin *conscientia*'s weakened sense, meaning simply, awareness of anything. However, the concept of awareness is not incompatible with Mead's theory of socially-derived awareness. This theory brings in a person's taking the other's role and addressing himself or herself regarding the nature of the object of awareness. If Mead was correct that awareness requires an at least implicit reference to oneself, this would

explain the difficulty some psychologists experience in distinguishing awareness and conscious awareness. For, whenever they are aware of anything, they would be indicating to themselves something about it.

But *consciousness*₄ is somewhat analogous to *consciousness*₁, since it implies a double viewpoint in all except those instances where the object of *consciousness*₄ is not an intentional mental occurrence (e.g., itch, which is a feeling that is not about anything). One has thoughts, perceptions, emotions, and the like, and, if one is *conscious*₄ of them, one is aware of their occurrence in a direct, noninferential way. Moreover, one normally is aware of them as belonging to oneself (or to one's inner self)—just as in *consciousness*₁ one shares knowledge with another person about X, in part, by being aware that the other has awarenesses of X.

If the unifying principle—which determines which totality of mental episodes makes up a person's conscious being—does indeed involve, as Locke (1690/1975) held, their appropriation through a combination of memory and *consciousness*₄, then the same can be said for *consciousness*₅ as for *consciousness*₄. Namely, *consciousness*₅, too, resembles *consciousness*₂ by involving a double perspective in the one person. Moreover, there may occur a bifurcation of one's conscious being, in which some of one's mental episodes are taken to be not one's own. Although one recalls them vividly, and may even be immediately aware of them, they can seem alien to the rest of one's conscious being. If they are ascribed to another's conscious being, one can also seem to be in a very intimate *consciousness*₁ kind of relation, that is, interpersonally consiring with someone about one's very thoughts as they occur, including the disowned attributed ones.

Barlow (1980) boldly suggested, in effect, that our ordinary concept of *consciousness*₆ has an essential interpersonal dimension. We normally consider someone to be conscious (rather than unconscious) in the absolute sense, he argued, if we can enter into a cognitive relation with him or her. According to O'Shaughnessy (1972), the *conscious*₆ person's own epistemological posture to the world is of the same kind as the person's who would want to test him or her in this way. More specifically, it is to have one's "awareness-apparatus" in an operating mode whereby one is in a position to reject or accept (or leave in doubt) that which our perceptual awareness and inferential thought tell us about the world, in the light of what our knowledge system contains about it. Again, this implies a doubling of the person's perspective: There are, on the one hand, the person's mental contents and, on the other hand, his or her taking an attitude toward them in regard to their truth.

The Objectivation Dimension

In any application, the concept of *consciousness*₁ is likely to be about the

actions of one or the other person in the relation. But this is not necessary, since the two people may be conscious₁ about, for example, someone's health or heredity, or the fact that a bridge is likely to collapse if used by the weighty army of the approaching enemy. In *consciousness*₂ and *consciousness*₃, as well, there is something that one's consciousness is of or about, or at least would be of or about if only it existed. But *consciousness*₂ is restricted to something objective about oneself—having to do with one's actions or inactions, and what they indicate about one's character or capacities; whereas *consciousness*₃ (awareness) can be about anything at all, including things that have nothing to do with the person who is conscious₃ of them.

In both *consciousness*₂ and *consciousness*₄ that of which one is or seems to be aware is something personal. However, there is nothing introspective about *consciousness*₂. Though one would often want to keep to oneself that which is witnessed or surmised, other people may also have testimony to give about it. And they could be, with regard to it, in an interpersonal cognitive relation of *consciousness*₁. In contrast, it is of course one's mental episodes that are the immediate objects of *consciousness*₄, and other people cannot have this kind of access except to their own episodes.

The totality that makes up one's *consciousness*₅ does not include the objects of *consciousness*₂, which are not mental episodes. At most, these are traits and characteristics that the person must infer about himself or herself from witnessing his or her own actions and failures to act. Although the objects of *consciousness*₂ are not the kinds of things that could comprise one's conscious being, what the latter may include is one's awarenesses that one performed certain actions, one's thoughts about them, and what they reveal about oneself.

According to certain views of *consciousness*₆, in this general state one takes toward the world a highly pragmatic interest and posture. In the interests of "life and its requirements" (Schutz, 1945/1962), one sets oneself to determine how the world is in relevant respects. This refers to the life that one is living and how one is managing to live it, which is the sort of question with which *consciousness*₂ is concerned. From this perspective on being conscious₆, we should expect a great deal of *consciousness*₂ to go on in that state, and even more in the case of obsessional people (Schachtel, 1973).

The Apprehension Dimension

Awareness, or mental apprehension, is involved in all the senses of *consciousness* that I have considered in this article, with the exception of Mead's (1934) first concept of *consciousness* ("objects in experience"). In all these cases, there occurs some form of mental apprehension of some fact about something, though this may be, so to speak, a false fact, and what it purports

to be about may not exist. To share knowledge with another (*consciousness*₁) with oneself (*consciousness*₂) is to become actively aware that something is the case; the concepts of *consciousness*₁ and *consciousness*₂ both refer to a certain pattern of mental apprehensions. And *consciousness*₄ is itself among the kinds of awareness to which the concept of *consciousness*₃ is applicable. *Consciousness*₄ refers to the state or faculty of being aware of one's mental episodes, whereas *consciousness*₃ is simply awareness of any kind. It would appear that, in order for a person's *consciousness*₅ to be constituted, there must occur appropriation and therefore apprehension by the person of some of his or her past and present mental episodes. Without the concept of *consciousness*₅'s taking account of the person's perspective in this way, I cannot see that it would have a use other than to refer to the person's stream of consciousness. Suppose one exemplifies *consciousness*₆ at this moment. Does this imply anything about one's awarenesses? One's mental faculties are in an active and waking state, and one is interested and responsive to one's environment. It is already clear, without further description of being *conscious*₆, that awarenesses must go on while one is in that state, and that it would not be the same general state if they did not continue. Although to be *conscious*₃ does not require that one be *conscious*₆, one's exemplifying the general state of *consciousness*₆ must mean that one also is *conscious*₃, that is, mentally apprehending the fact that something is the case whether correctly or not. This simply follows from one's epistemological posture to the world.

The Introspection Dimension

I would go so far as to propose that any mental episode might occur to a person without his or her becoming aware of its occurrence. This includes, of course, the kind of awarenesses that occur when one exemplifies *consciousness*. For example, one may pass moral judgment on one's action without taking note of the fact that one has done so (cf. Jung, 1958/1970). This was a point made by Bergmann (1964) about *consciousness*₄, specifically about the act of acquaintance, as he called it, that renders a mental episode conscious. Without a further act of acquaintance directed upon the first one, one would be *conscious*₄ of a mental episode without knowing that one is. I would apply Bergmann's point, of course, to *consciousness*₃ as well—just as he did, when he insisted that it is "the very nature of consciousness" to require an additional act of acquaintance. Thus, awarenesses of all kinds are not *conscious*₄ unless awarenesses of them occur.

But the concept of *consciousness*₁ differs from, to abbreviate, two, three, and four, by requiring consciousness in the introspective sense. This can be seen quickly by focusing again on that exchange of knowing glances I mentioned in an early section of this article. The cognitive relation between people that defines *consciousness*₁ includes A's (B's) awareness that B (A) is aware that A

(B) is aware of X, which obviously requires that A (B) be aware that A (B) is here and now aware of X.

Normally, when we are aware in a firsthand way of the occurrence of a mental episode, we are aware of it as belonging to oneself or to one's inner self; in this way, we appropriate it, making it part of our conscious being. *Consciousness*₅ requires that *consciousness*₄ work in this way, though it requires more—including the ability to recall past experiences and to recall them as one's own. Moreover, they must be recalled "from the inside," as some authors have phrased it. That is, one must recall them from the first-person perspective, rather than as though one had made observations and inferences about oneself.

The relation of the concepts of *consciousness*₄ and *consciousness*₆ is especially intriguing. Does being *conscious*₆ imply anything with regard to the introspection dimension? It may be implicit in our concept of *consciousness*₆ that the person who is *conscious*₆ is not only alert to the outer world but also alert to certain significant events that occur in his or her mind (cf. O'Shaughnessy, 1972). An epistemological posture wherein we are positioned to gage the truth or falsity of our perceptions and thoughts would require that we be aware of their occurrence to us.

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