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Consciousness$_4$: Varieties of Intrinsic Theory

Thomas Natsoulas

University of California, Davis

A mental-occurrence instance is conscious$_4$ if (and when) it is an object of inner (second-order) consciousness; that is, if a mental-occurrence instance occurs and is conscious$_4$ on that occasion, one is conscious of it on the spot without having to take notice first of something else. In contrast, Freud's preconscious and unconscious psychical processes, whenever they occur, are examples of nonconscious$_4$ mental-occurrence instances, which are not objects of inner (second-order) consciousness; that is, one has no consciousness of them unless one (a) takes notice of something else (e.g., a behavior, a bodily change, a conscious$_4$ mental-occurrence instance, or a brain-process recording) and (b) infers, therefrom, their occurrence. Determining how inner (second-order) consciousness transpires will soon have high priority on the scientific agendas of psychologists of consciousness. To assist in their forthcoming explanatory search, I present a straightforward survey of a number of intrinsic theories of consciousness$_4$. Intrinsic theory holds that any conscious$_4$ mental-occurrence instance has itself as (inner) object, plus whatever else it may give consciousness of; it is conscious$_4$ due to its own structure, not due to what happens next or later. Intrinsic theory differs from appendage theory and mental-eye theory, which both hold that a mental-occurrence instance cannot be conscious$_4$ on its own, cannot give any consciousness of itself, only of something else at most.

When engaged in their science, psychologists sometimes make reference, quite naturally, to "conscious" mental-occurrence instances—as part of their effort to explain certain of their research subjects' achievements, performances, actions, reports, behaviors, responses, reactions, or bodily changes. But psychologists do not always take the time to explain how, in this case, they are using the word *conscious*. I do not mean to suggest that psychologists' qualification of mental-occurrence instances as "conscious" is often obscure. It seems to me that, in this case, psychologists' use of *conscious* (and *consciousness*) is ordinary and commonsensically familiar. That is, psychologists intend to describe as "conscious" those of an individual's mental-occur-

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Requests for reprints should be sent to Thomas Natsoulas, Ph.D., Department of Psychology, University of California, Davis, California 95616-8686.

rence instances with which the individual has "direct, first-person acquaintance." The latter is how some authors (e.g., Gustav Bergmann, the most sophisticated proponent of methodological behaviorism [Natsoulas, 1984b]) have characterized *the commonly recognized, special firsthand access which only the person himself or herself has to his or her conscious mental-occurrence instances, and only to them.*

In addition, most psychologists believe that "nonconscious" mental-occurrence instances also take place. Of course, the person does not have any firsthand consciousness, in the ordinary sense that I have just indicated, of his or her nonconscious mental-occurrence instances. In that sense, nonconscious mental-occurrence instances are not cases of consciousness. Indeed, psychologists may well suggest that it is nonconscious mental-occurrence instances that all of us are actually referring to whenever we speak commonsensically of "something's not being conscious" (except when the "something" is a creature, or an entity of some sort, e.g., a cerebral hemisphere, a machine, a rock).

Nevertheless, in a different sense of the word, a nonconscious mental-occurrence instance is often, in fact, a case of "consciousness." That is, nonconscious mental-occurrence instances, though they are nonconscious, may well be "consciousnesses," or occurrent awarenesses, of something beyond themselves. Consider, as an example of such a "consciousness," an ordinary thought about William James, a thought you might have while reading this article. This passing thought might be evoked in you (in your brain) by the references to consciousness contained in this article, or in some other way. Having recently studied James's *Principles*, you might have the passing thought to the effect that William James considered *mental occurrences' transcending themselves (i.e., their being about something else)* to be "the most mysterious thing in the world." This passing thought could be, in my view, either conscious or nonconscious, in the sense that I have indicated. Whether your passing thought about William James is conscious or nonconscious (i.e., whether it is or is not an object of your unique inner access to your own mental life), your passing thought is an instance of your being conscious of William James; that is, it is an instance of your being occurrently aware (in thought, nonperceptually) of William James. Your conscious or nonconscious passing thought is a particular conceptual consciousness that, in this case, has a content which categorizes William James in a certain specific way, namely, as having held that a certain fact (italicized above) is the most mysterious thing in the world.

Elsewhere, I have expressed the main point of the preceding paragraph as follows. Many of your nonconscious mental-occurrence instances are cases of your being "conscious_3" of something (or as though of something, in those cases where the object of your consciousness has only apparent existence) though without (since they are nonconscious) your being "conscious_4" of them (Natsoulas, 1983). These are two different meanings of *conscious*.

1. I have called the first of these two meanings "the concept of consciousness$_3$" or "the awareness meaning" (Natsoulas, 1986–1987, 1992d). That is, if you are now in a state of consciousness$_3$, then you are now occurrently aware of something (or as though of something), which can be anything. And your being thus occurrently aware may have been caused *in any way*; *how* it came to occur does not bear on whether you are or are not now in a state of consciousness$_3$.

2. I have called the second of these two meanings of *conscious* "the concept of consciousness$_4$" or "the reflective meaning" (Natsoulas, 1986–1987, 1992e). That is, if you are now in a state of consciousness$_4$, then you are now occurrently aware of the mental-occurrence instance that constitutes that state, and you are occurrently aware of it now in that direct, uniquely personal way I mentioned above. Your now being occurrently aware of it in this special way is essential to your qualifying as now being in a state of consciousness$_4$. Your nonconscious$_4$ mental-occurrence instances, though they may be instances of consciousness$_3$ (e.g., a nonconscious$_4$ thought about William James), though they may be occurrent awarenesses of something, are not themselves objects of your direct, first-person acquaintance, which I call "inner (second-order) consciousness" (cf. Natsoulas, 1992a, in press-a). Your conscious$_4$ mental-occurrence instances, however, are necessarily, by definition, objects of inner (second-order) consciousness.

In its entry under the word *consciousness*, *The Oxford English Dictionary* (1989) explicitly defines and illustrates the use of six concepts of consciousness, including the two concepts already mentioned with subscripts above. The fourth subentry picks out the kind of consciousness that is the general topic of the present article, and which I call, therefore, "consciousness$_4$." Let me just give the dictionary's explicit fourth definition of *consciousness*. I shall not explore, as I have elsewhere (Natsoulas, 1983, 1992e), the various corresponding examples of use which the dictionary provides. The dictionary states that consciousness in the fourth sense is "the state or faculty of being conscious, as a condition and concomitant of all thought, feeling, and volition; 'the recognition by the thinking subject of its own acts and affections' (Hamilton)."

As I see it, consciousness$_4$ is a property that *some* mental-occurrence instances possess; not all mental-occurrence instances possess this property, as, for example, Brentano (1911/1973) argued, and the above dictionary definition seems to say (cf. Searle, 1989, 1990a, 1990b; Zelazo and Reznick, 1990). It is interesting to note that Hamilton (1895, p. 932) himself, whom the dictionary quotes within the fourth definition itself (see above), held that there exists variation among mental-occurrence instances; some of them do not possess, he stated, the "intensity" necessary to be conscious, to be objects of inner (second-order) consciousness.

A mental-occurrence instance is conscious$_4$ if and when (at the moment when) it is an object of inner (second-order) consciousness; that is, it is con-

scious$_4$ if and when one is conscious (occurrently aware) of its occurrence when it occurs without having to take notice of something else. Whenever they occur, Freud's preconscious and unconscious psychical processes are examples of nonconscious$_4$ mental-occurrence instances (Natsoulas, 1985). Nonconscious$_4$ mental-occurrence instances are not objects of inner (second-order) consciousness; one does not have any consciousness of them unless one (a) takes notice of something else (e.g., a behavior, a conscious$_4$ mental-occurrence instance, a bodily change, or a brain-process recording) and (b) infers, therefrom, their occurrence.

Among possible grounds for your believing a certain nonconscious$_4$ mental-occurrence instance took place in you is your having inner (second-order) consciousness of a different mental-occurrence instance. For example, you might have inner (second-order) consciousness of your first-order, imaginal consciousness of a friend's face, and you might infer therefrom that a nonconscious$_4$ mental process involving memory-trace activation (Natsoulas, 1985; i.e., a mental process of which you cannot have inner [second-order] consciousness) must have produced your first-order, imaginal consciousness of your friend's face. The important point to note is that you are, in contrast, conscious of your imaginal consciousness's occurrence directly; that is, not by taking notice of anything else (which would disqualify this case from being a case of consciousness$_4$; cf. Natsoulas, 1983, p. 40).

In the latter sentence, I mean "anything else" to include *even your friend's face*. Your simply having visual imagery of your friend's face does not suffice for you to infer anything about yourself. Simple visual imagery of your friend's face, though this imagery is, of course, part of your mental life, is not about you, nor is it about any part of your mental life (cf. Findlay, 1966, pp. 168–170; Natsoulas, 1977, 1978, p. 143, 1983, pp. 39–41). You cannot infer anything about yourself (a) from the properties you take notice of as belonging simply to his or her face, or (b) from which friend's face you take the face to be.

Psychologists will want to know *exactly how* inner (second-order) consciousness occurs. They will want to know the "mechanism." They will not be satisfied simply with knowing *that* inner (second-order) consciousness takes place (which is sometimes, though very rarely, doubted [e.g., Hebb, 1982]). I expect that the problem of consciousness$_4$, or of how conscious$_4$ mental-occurrence instances differ from the nonconscious$_4$ ones, will soon be high on the scientific agenda of the emerging psychology of consciousness.

My purpose in the present article is to assist psychologists in their forthcoming search for an adequate explanation of inner (second-order) consciousness. I present here a survey of a number of what I call "intrinsic" theories of inner (second-order) consciousness. I believe that the present article may help psychologists of consciousness to make some choices regard-

ing which theories of consciousness$_4$ they want to develop. Also helpful in this regard may be (a) a forthcoming article of mine on the topic of *what is wrong with "appendage" theory of inner (second-order) consciousness* (Natsoulas, in press-b) and (b) two other very recent, unpublished papers concerning inner (second-order) consciousness (Natsoulas, 1991a, in press-a; see also Natsoulas [1992a]). But, it will be evident that a comprehensive analysis of intrinsic theory of consciousness$_4$ still awaits.

Previously to the present article, I called the intrinsic kind of theory "self-intimational." In an article published in this journal, I raised the question "Is any mental-occurrence instance self-intimating?" (Natsoulas, 1988). And in a sequel to the latter article, I examined at length four major objections, which have appeared in the literature, to "self-intimational" accounts of consciousness$_4$ in general (Natsoulas, 1989a). However, it is now clear to me—therefore, I have switched from *self-intimational* to *intrinsic*—that some psychological audiences consider "self-intimational" a pejorative epithet due to their familiarity with Ryle's (1949) influential evaluation of such theories.

Consistent with my latter, informal observation, a prominent psychologist of consciousness has recently stated,

> Especially important mental episodes are those that yield an awareness of our own mental activity, an awareness that is accurate in variable degree. We not only are aware of some external events, sometimes called "simple awareness;" we can also be aware of some of our own mental activity, a state . . . referred to as "reflected awareness." Rather than seeing awareness as mysteriously "self-intimating," as Brentano [1911/1973] did, we should, I think, regard reflected awareness as the product of remembering or inferring a just prior or still earlier intentional state or mental episode. Our introspective access should then be as good or poor as the conditions for remembering and inferring with accuracy—matters we know something about. (Dulany, 1991, p. 105)

Thus, remembering a just prior mental-occurrence instance is less "mysterious," according to Dulany, than a mental-occurrence instance's giving occurrent awareness of itself in its own very occurrence. Dulany considered such remembering to be the less mysterious though, I take it, *what is remembered is a mental activity or state that, at the time of its occurrence, was not conscious$_4$* (i.e., was not an object of inner [second-order] consciousness). But can we actually later *remember* undergoing mental-occurrence instances of which we were not conscious at all at the time of their occurrence (cf. Armstrong, 1979; Natsoulas, in press-a; Shevrin, 1991; see also Tulving [1985] and Natsoulas [1986] on what remembering is)?

Note also that, in addition to expressing skepticism concerning intrinsic theory, Dulany (1991) may have been indicating, in the above passage, his support for what might be called a "remembrance" version of the kind of theory of inner (second-order) consciousness that fits under my heading of "appendage" theory (see next). If I correctly understand Dulany's above

statement, a mental-occurrence instance is $conscious_4$ when its occurrence is followed by a remembrance of it as having just occurred. Aside from this remembrance of the mental-occurrence instance, there is no inner (second-order) consciousness of the mental-occurrence instance, since the second means of "introspective access" that Dulany mentioned in the above quoted passage is inferential, a matter of taking notice of something else as an inferential basis.

Furthermore, I take it to be Dulany's view that even the remembrance of a just prior mental-occurrence instance would have to be remembered in turn (subsequently to that remembrance's occurrence, of course) in order for one to know not-by-inference that the remembrance occurred. Thus, an immediate remembrance of a just prior mental-occurrence instance, too, would not be intrinsically conscious, in the self-intimational sense of being itself an occurrent awareness of itself.

In my forthcoming article concerning what is wrong with appendage theory, I distinguish the following three categories of theories of $consciousness_4$ (Natsoulas, in press-b):

1. Appendage theory of $consciousness_4$ holds that a mental-occurrence instance is $conscious_4$, rather than $nonconscious_4$, due to *another, distinct, subsequent mental-occurrence instance* that is about it and gives consciousness of it directly, without one's having to take notice of something else.

2. Mental-eye theory of $consciousness_4$ holds that a $conscious_4$ mental-occurrence instance is an object of a kind of *inner perceiving ("introspection") analogous to a process of ordinary perceiving.* This "inner perceiving" would be a complex process that has inner (second-order) consciousness of mental-occurrence instances as a product and part of this larger process (cf. my analogous distinction between [a] the activity of visual perceiving and [b] the stream of visual perceptual experience, which is a part and product of the activity of visual perceiving; Natsoulas, 1989d).

In contrast to mental-eye theory, appendage theory usually has a $conscious_4$ mental-occurrence instance evoking an occurrent awareness of it—just as "stimuli" evoke "responses" in the behavioristic conceptions of psychological functioning, with which all present-day psychologists are so very familiar.

3. Intrinsic theory of $consciousness_4$ holds that any $conscious_4$ mental-occurrence instance has *itself as object of inner (second-order) consciousness* (plus whatever else it may give consciousness of). $Conscious_4$ mental-occurrence instances are such, intrinsically, that they occur $consciously_4$; nothing need follow upon the occurrence in you of one of them for you to have consciousness of it.

As the intrinsic theorist Smith (1989, p. 85) dramatically expressed the latter point, if you get obliterated immediately upon having a certain $conscious_4$ per-

ceptual experience, this perceptual experience was no less conscious_4 when it occurred than if you had been given a chance to respond to it, to recollect it, and so on. Also, in whatever way, however simply, a conscious_4 mental-occurrence instance may come to occur, its occurrence alone suffices for it to be conscious_4.

A Common Power by Which One Is Aware That One Sees and Hears

Without distortion, Aristotle's thought cannot be recruited to the purpose of debunking consciousness_4 (e.g., Hebb, 1982). For one thing, Aristotle explicitly addressed the *how* of inner (second-order) consciousness, in the case of perceptual experience. In *De Anima* (III, 2), he argued that *the visual sense itself* gives us inner (second-order) consciousness of seeing what we are seeing (X), rather than a distinct, introspective sense that is inwardly directed on the visual sense (cf. mental-eye theory, identified in the preceding section). To assign, in the visual case, inner (second-order) consciousness to a further sense means, Aristotle argued, that (a) the further sense, too, would have color as its object, and therefore (b) we would possess two visual faculties.

Kosman (1975) explained why, for Aristotle, the introspective and introspected sense would have the same object: "Given that [for Aristotle] the activity of the object of perception as such is the same as the activity of perception itself, there must be a single awareness of them both" (p. 438). That is, to see something (X) is *for X to be actualized as a visual sense object*; this actualization of X, which occurs within the visual sense itself, is the identical occurrence as the occurrence of X's being seen. Thus, to have inner (second-order) consciousness of seeing X is nothing other than to see X. Modrak (1987) stated as follows Aristotle's grounds for holding that it is each perceptual sense that gives consciousness_4 of its own activity: "Reflexive consciousness of sensing is the awareness of a sense object" (p. 145). An introspective sense would have no purpose; it would provide the same consciousness as the respective outer sense (e.g., the sense of sight) provides.

However, to claim that it is by sight that we have inner (second-order) consciousness of seeing X is *not* to claim that inner (second-order) consciousness amounts *simply* to seeing X (cf. J. R. Searle, as discussed later in the present article). Rather, to have inner (second-order) consciousness of seeing X is to see X but *in a certain way*:

> The cognitive act . . . is the simple apprehension of the cognitive object, which is identical to the mere presence of the cognitive object as part of the subject's experience. . . . The reflexive apprehension of the cognitive act is the reflexive awareness of the object *as an object present to oneself*. The simple apprehension of the object is central to the reflexive awareness of the cognitive apprehension, and neither would be possible without the object of the experience. . . . There is a single cognition, which includes the cognitive object, its apprehension and the reflexive awareness of its apprehension. (Modrak, 1987, p. 153; italics added)

That is, we see whatever we see (i.e., X) but we see X *as being part of our visual experience*; we have inner (second-order) consciousness of our seeing by seeing what we see *as being such*, as being a visual sense object. Accordingly, Oehler (1974) explained Aristotle's general view as follows: "Self-consciousness is consciousness of itself by means of consciousness of an object" (p. 498).

But we cannot *literally see* that we are having a certain visual experience; we can only see X and certain of its properties which affect the light. Therefore, Modrak's above interpretation ties in better with Aristotle's *other* treatment of consciousness$_4$: as a common power of the single perceptual faculty—whichever one or more of its component perceptual senses (e.g., the visual sense) are activated at a particular time. Contrary to *De Anima*, Aristotle argued in *De Somno* (455a13–21) that it is *not* by sight that one has inner (second-order) consciousness that one sees what one sees, but by a power that is possessed in common by all the perceptual senses in their constituting a single perceptual faculty (cf. Kosman, 1975). Thus, to take X to be part of one's visual experience, as that which one is seeing, is not to *see* this property of it; rather, it is to apprehend X's actualization as visual sense object differently than one would apprehend it without reference to one's visual experience. This Modrak (1987) characterized as an "apperceptual awareness" by means of the perceptual faculty (by means of which, also, one apprehends how the proper objects of the different senses differ).

In perceptual apperception, what is apprehended is none other than sense objects (visual or other). Aristotle stated, "Evidently knowledge and perception and opinion and understanding have always something else as their object, and themselves only by the way" (*Metaphysica*, 1074b35–36). That the particular visual sense objects are objects of visual experience (i.e., that one is seeing them) is grasped only "incidentally," only "on the side." Such apperceptual apprehension amounts to the perceptual *assigning of a suitable meaning* to sense objects themselves—a quite suitable meaning since, according to Aristotle, the visual sense object and the seeing of it are, after all, the identical occurrence. And such apperceptual apprehension is indeed a *perceptual* ascription, for it occurs in the very seeing of X, not as a separate judgment by means of a further faculty.

There is more to Aristotle's conception of consciousness$_4$. He makes relevant statements, as well, about other conscious$_4$ mental occurrences than the perceptual ones, and about their being conscious$_4$. Modrak (1987) and Oehler (1974) among others have usefully explained and commented on Aristotle's additional relevant statements, though these statements are not as explicit about inner (second-order) consciousness as are Aristotle's statements about being conscious$_4$ of one's perceptual experiences.

Every Mental Act, No Matter How Simple, Has a Double Object

Brentano (1911/1973) summarized his view in part as follows:

> Every mental act is conscious; it includes within it a consciousness of itself. Therefore, every mental act, no matter how simple, has a double object, a primary and a secondary object. The simplest act, for example, the act of hearing, has as its primary object the sound, and for its secondary object, itself, the mental phenomenon in which the sound is heard. (pp. 153–154)

I ignore here Brentano's (extended) argumentation to the effect that *all* mental acts are $conscious_4$, and I concentrate on how, in his view, a mental act is $conscious_4$.

Brentano rejects the theoretical identification of hearing with its proper object, which is a sound; sound is not a mental phenomenon, whereas hearing is. But any act of hearing includes a "presentation" of a sound, where *presentation* means, as B. Smith (1988) explained: "To have a *Vorstellung* [i.e., presentation] of something is, roughly, to have an idea of it, to have it before one's mind either intuitively or conceptually" (p. xxiv). One cannot mentally apprehend X unless this apprehension includes *presenting X to one's mind*, by means of, for example, a sensory state.

Therefore, any act of hearing, being intrinsically $conscious_4$, includes a presentation of itself, as well as a presentation of its primary object (sound). This would be problematic if it meant that each act of hearing consists of two distinct presentations. For one thing, since the presentation of the auditory act would include a presentation of a sound (Brentano, 1911/1973, p. 134), there would be two auditory experiences of any sound heard.

It might be suggested that mere presentation of the sound suffices, all by itself, to give $consciousness_4$ of one's hearing it. However, (a) this would contradict Brentano's fundamental assumption: for mental reference to anything, presence of the latter before the mind is essential (Brentano, 1911/1973, p. 198). An unpresented act of hearing would be, subjectively, as though it had not occurred; there could not be any kind of apprehension of it (Natsoulas, 1989a, p. 110).

Also, (b) it is a sensory activity that presents an act of hearing (no less so than how a sound is presented [Brentano, 1929/1981, pp. 57–59]), a sensory activity involves qualities of sense, and, therefore, Brentano's view again seems to imply that one hears twice any sound that one hears.

But Brentano (1911/1973) held that hearing a sound has two intentional objects (a sound and the act itself of hearing) *without including two presentations*: "In the same mental phenomenon in which the sound is present to our minds we simultaneously apprehend the mental phenomenon itself" (p. 113). A single presentation presents both sound and act of hearing. Other theorists may hold that there occur purely primary presentations of sound (i.e., non-

conscious$_4$ auditory experiences). But Brentano held that only higher-order presentations ever occur, in the sense that each of them is therein itself presented to the mind, along with any nonmental phenomenon (e.g., sound) to which they may refer. (Also, one's act of hearing is presented *as a conscious$_4$ act*, as an act of which one is conscious$_4$ [Brentano, 1911/1973, p. 129].)

One hears sounds *as being intentional objects of one's conscious$_4$ acts of hearing them*, which does not mean mis-taking sounds to be intrinsic to acts of hearing. About acts of judgment, Brentano (1911/1973) wrote the following, which applies, in his view, to acts of hearing and to all mental occurrences:

> It will often emerge, if one proceeds with the proper care, that the objects of judgement and of the presentations on which they are based are quite different from what people commonly imagine them to be. A good part of them will prove to be objects of the references given [incidentally] which are *determinately compounded with the primary objects in a distinctive manner.* (p. 277; italics added)

This compounding of primary and secondary objects would seem to be a crucial element in Brentano's account of consciousness$_4$. He wrote (p. 139) of "the characteristic fusion [together] of consciousness and [primary] object of consciousness" in the presentation of them.

But how are sound and act of hearing it "determinately compounded" in the relevant presentation? How are they presented together in a single presentation? Smith (1986) speaks—"as Brentano prescribed"—of the presentation of the primary object as "modified by" the presentation of the secondary object. Accordingly, Brentano (1911/1973) wrote that, in hearing a melody, what appears to the perceiver *is not a succession of acts of hearing*, but a succession of notes together with oneself as hearing "one note as present and another note as past and retreating still further into the past" (p. 406). It is the musical notes that are primarily presented, but "modified" as being objects of one's acts of hearing them. This would seem to be the significance of a mental-occurrence instance's being its own "secondary" object, apprehending itself "incidentally," "concomitantly," and "as something additional" to its primary object.

Brentano developed his view of consciousness$_4$ further and consistently with the above. Especially, he was concerned with describing the "inner consciousness" of a mental act to include, as well, a dimension of judgment in all cases and a dimension of emotion in many cases. Thus, consciousness$_4$ is not simply a matter of experiencing presentations, though a presentation is essential in every case.

Consciousness Is the Subjective Side of Certain Psychical Events

According to Sigmund Freud (who was a student of Brentano's), the property of consciousness is intrinsic to, is the "subjective side" of, every con-

scious (i.e., as distinct from preconscious or unconscious) mental-occurrence instance, and consists of the following three features (for pertinent quotations from and references to Freud's published works, see Natsoulas [1984a, 1985, 1989b, 1989c, 1991b, 1992b, 1993, 1992f]).

1. All conscious mental-occurrence instances—whether these are sensations, perceptions, imagery, or hallucinations, or thoughts, judgments, memory experiences, wishes, or emotions, or any other kind of mental occurrence—are *qualitative, experiential gestalts which are presented (appear) to one's direct acquaintance.* That is, there occurs, as part of any conscious mental-occurrence instance itself, a primitive immediate grasp of its presented qualities (which it possesses due to the nature of its constituent elements as brain process). Any conscious mental occurrence is, as it were, phenomenally there whenever it occurs—as no preconscious or unconscious mental occurrence ever is, because such an occurrence is never qualitative, is never an experience (contrast Marcel, 1988, pp. 123, 130).

However, mere acquaintance with the qualitative dimension of a conscious mental-occurrence instance is not awareness of the instance, or of any aspect of it, *as anything.* Moreover, if this first feature were all that there was to consciousness, it would be a consciousness *of which its owner knew nothing,* which Freud rejected as not worth discussing. Although Freud was thus engaged in ruling out the idea that any kind of consciousness_4 belongs to preconscious and unconscious mental occurrences, his point applies as well to having mere acquaintance with qualities.

2. Also, each conscious mental-occurrence instance includes as an intrinsic dimension of it *a noninferential conceptualizing awareness of the mental-occurrence instance.* This is analogous to Brentano's cognitive or judgmental dimension of inner consciousness, which I mentioned but did not discuss above. Not only is a conscious mental-occurrence instance presented and directly apprehended in its qualitativeness, but also there is, as part of its occurrence, awareness of it as this (a mental-occurrence instance) or that (something else). Freud's indirect realism of perception holds that perception is a matter of apprehending (mis-taking) one's perceptual experiences as (for) something else, which belongs to the environment or body.

3. And also, as part of consciousness, there is *awareness of the conscious mental-occurrence instance as* $\textit{conscious}_4$, as something of which one is conscious_4. A mere inner (second-order) consciousness, however direct, of a mental-occurrence instance, that is, an inner (second-order) consciousness that was not itself too an object of consciousness_4, would not count as an actual consciousness in Freud's book. The point is not that occurrent awareness cannot occur nonconsciously_4; preconscious and unconscious mental-occurrence instances may indeed be consciousnesses_3 of something else. The point is that they are not instances of consciousness in Freud's sense, which

includes all three features that I am here listing. Preconscious and unconscious mental occurrences are not qualitative, according to Freud, and so there cannot be acquaintance with them, or direct conceptualizing awareness of them, which rests on acquaintance with qualities.

It might be objected that Freud's account of consciousness is not an intrinsic account. The grounds might (wrongly) be that one can have consciousness$_4$ of preconscious mental-occurrences instances, including those that have been, but no longer are, unconscious in the sense of their being objects of repression. In such cases, it might (wrongly) be argued, consciousness$_4$ must come from the outside, so to speak; consciousness$_4$ is not intrinsic to those mental occurrences that can also occur nonconsciously$_4$.

Freud's answer is that no mental-occurrence instance that is not intrinsically conscious can be an object of inner (second-order) consciousness. There is no way for a preconscious mental-occurrence instance to be apprehended on the spot, as an immediate result of its occurrence. The "becoming-conscious" of a preconscious mental-occurrence instance is something else; namely, this mental-occurrence instance's producing a *counterpart* conscious mental-occurrence instance with very similar cognitive content to itself. Thus, this conscious counterpart is not a consciousness of the preconscious mental-occurrence instance, but it does give, of course, consciousness of itself.

It is obviously true that we can have conscious thoughts about our nonconscious mental-occurrence instances, even about those that are dynamically unconscious. But such conscious thoughts do not render conscious$_4$ either dynamically unconscious mental-occurrence instances or any other nonconscious mental-occurrence instances—any more than your thinking about someone else's nonconscious mental-occurrence instances renders them conscious$_4$. According to Freud, such conscious thoughts transpire in a different part of one's psychical apparatus from that very large part in which one's preconscious and unconscious mental-occurrence instances take place.

Between the two parts of the psychical apparatus, there are causal relations, and one can consciously$_4$ think about what goes on in the nonconscious portion of the apparatus, just as one can think about another person's psychical apparatus. The causal relations between the two parts of the psychical apparatus make possible harmonious conscious and nonconscious functioning, as nonconscious mental-occurrence instances succeed in evoking suitable counterparts in the "perception–consciousness system," where all (and only) conscious mental-occurrence instances occur.

Fully Conscious Seeing Involves Acquiring Knowledge of Seeing

Rundle (1972) addressed what he called "fully conscious [visual] perception." This kind of visual perception involves (a) being aware of the object

seen and, also, (b) being aware of seeing it, which amounts to, Rundle (1972) stated, "being aware *that* one sees it" (p. 128). Thus, fully conscious perception necessarily has two different objects of awareness, since *seeing something* is, in Rundle's view, entirely distinct from *the something that is seen*. Awareness of seeing something is a kind of self-awareness, though it need not put any emphasis on oneself.

However, the idea that each fully conscious case of seeing something has a second object may be misleading, according to Rundle, because seeing something is not itself actually "an object of sight" (not, e.g., like a cat that is seen); nor need one, in being aware that one is seeing something, observe one's body (or any kind of self). How, then, is inner (second-order) consciousness of seeing something related to being visually perceptually aware of the object that is seen?

Is the awareness that has seeing for its object simply a thought to the effect that one is seeing whatever one is seeing, a thought prompted by the latter occurrence? If so, "second-level awareness" could not be considered intrinsic to seeing; fully conscious perception would be distinguished by its having a certain effect, not by what it is in itself.

Rundle (1972) objected,

> Here we risk committing an error comparable to that involved in locating seeing somewhere in the animal's responses; just as there is nothing in the animal's behaviour which can be thus identified, so the situation is no better if we take the responses to be the thoughts which the object elicits rather than the bodily movements brought about. Generally, such thoughts will occur against the background of an accomplished perception, and it will be only by accident that the moment of seeing and the moment of thinking coincide. (p. 131)

Fully conscious seeing, according to Rundle, intrinsically involves *acquiring knowledge about the object seen and of the fact of seeing the object*. Acquisition of this knowledge is part of what occurs when one sees the object; but the thoughts and behaviors to which this knowledge disposes one are distinct from the seeing itself.

It should be noted that awareness, whether it is first- or second-level, was understood by Rundle (1972) as dispositional, rather than as occurrent awareness: "Both forms of awareness can be understood in terms of knowledge: awareness of the object [*y*] is knowledge of its presence and awareness of seeing *y* is knowledge thereof, or knowledge that one sees *y*" (p. 128). The same applies in the case of being absorbed in thinking about a problem; one has second-level awareness of being engaged in thinking what one is thinking, but this awareness may remain purely dispositional, involving no thought in turn about one's thinking.

Nevertheless, absorption in thought would still be a case of fully conscious thought, according to Rundle. The thinking intrinsically contains or

includes a knowledge of the thinking, though the thinker need not make explicit to himself or herself the fact, which the thinker knows, that he or she is engaged in this bout of thinking.

How does one know one is thinking what one is thinking (or seeing, etc.)? One does not know this from the thinking, as though the thinking comes first and the knowing is somehow based on it. As Rundle (1972) stated about a tickling sensation: "There is nothing that I . . . regard as a sign of or evidence for the sensation itself, and if I am asked how I know that I am having the sensation I cannot answer" (p. 144). So, too, it is *in having a certain thought* that one knows one is having this thought, not by something further that mentally occurs.

Second-level awareness is knowledge that is acquired in the very having of the particular first-level awareness, and is distinct from the thoughts or behaviors that *manifest* the second-level awareness. However, the nature of the second-level awareness must be understood in terms of what it disposes one to think or do. What is it, more specifically, to know that one sees what one sees or to know that one thinks what one thinks? To what specific thoughts or behaviors does the knowledge that is second-level awareness dispose one?

According to Rundle, such knowledge is a disposition to say or verbally to think that one sees what one sees or thinks what one thinks; and it requires that one implicitly distinguish oneself from other, possible subjects of experience or thought: "If the child lacks a grasp of the concepts involved in 'I see . . .' he cannot be said to have that knowledge which second-level awareness requires" (Rundle, 1972, p. 135). But, nevertheless, a child might give verbal expression to the knowledge that he or she acquires in having first-level awareness (e.g., the child might list the contents of a room that he or she sees) though this child lacks, due to lacking the necessary concepts, the (second-level) knowledge of seeing what he or she is seeing.

If, as a result of traumatic loss of the ability to speak, dispositions to speak are, after a point, no longer perceptually acquired, second-level awareness may still be instantiated in the form of dispositions to have suitable verbal thoughts.

The intrinsicality of Rundle's (1972) account of consciousness$_4$ was vividly rendered when he addressed our firsthand awareness of thoughts, verbal and nonverbal:

> There is not something which unfolds before me—my thoughts which I can "monitor" in the way that I can my speech, which I can attend to or not, as I please. If I am having such-and-such a thought, then I *ipso facto* know that I am having that thought, and my thoughts do not go on in the absence of my knowledge of them. (p. 154)

This does not apply to every other kind of mental-occurrence instance (e.g., to seeing; see above), but the question of interest is how it comes about that a thought involves (linguistic) second-level awareness? If training is responsible, how does it generalize to a particular new thought? Might it be expected, on Rundle's view, that the more bizarre or original a thought, the less likely it is to be $conscious_4$? Is the answer to the latter question the same for verbal and nonverbal thoughts?

Conscious Mental States Manifest Content to a Point of View

In Searle's (1983) view, all perceptual experiences are $conscious_4$; *the content of any perceptual experience has reference to the experience itself, as well as to the experience's primary object in the environment or body.* This means all perceptual experiences are self-referential due to their intrinsic character, not due to what they produce or accompanies them. It seems Searle came to this conclusion from his assumption that a perceptual experience's content includes all the conditions required to "satisfy" the experience (i.e., to make it veridical).

A perceptual experience's "conditions of satisfaction" include the experience's being caused to occur by its primary intentional object in the environment or body, that is, by that which we commonly say is perceived in having that experience. Therefore, perceptual experience is always "causally self-referential"; that is, it always gives awareness of itself as being an effect of its intentional object. In having a particular perceptual experience, one experiences a certain environmental or bodily intentional object, and also one apprehends a causal relation between this object that is perceived and the particular perceptual experience wherein it is experienced. Here is how Searle (1983) explained what is involved:

> The sense...in which the visual Intentional content is self-referential is not that it contains a verbal or other representation of itself: it certainly performs no speech act of reference to itself! Rather, the sense in which the visual experience is self-referential is simply that it figures in its own conditions of satisfaction. The visual experience itself does not *say* this but *shows* it; in my verbal representation of the Intentional content of the visual experience I have said it. Furthermore, when I say that the visual experience is causally self-referential I do not mean that the causal relation is seen, much less that the visual experience is seen. Rather, what is seen are objects and states of affairs. And part of the conditions of satisfaction of the visual experience of seeing them is that the experience itself must be caused by what is seen. (p. 49)

Although a visual experience is not seen, although it is not a primary object of this (or any) visual experience, it somehow "shows" itself in the very having of the experience; it "shows" itself as caused to occur by its primary intentional object. How does a perceptual experience "show" itself—in

a way that is necessarily different from how the primary intentional object, which is seen, "shows" itself?

I have elsewhere suggested that Searle could give the following answer to the latter question:

> The perceiver sees the intentional object such that he or she is aware of seeing it. A visual experience presents its object and one is aware of the object *as visually presented* (Smith, 1984). The visual experience has qualitative phenomenal properties allowing the intentional object to appear. Consequently, one is aware not merely that that object there has certain properties. One is aware of it as qualitatively experienced. In this way, a visual experience "shows" itself. (Natsoulas, 1990b, p. 21)

More recently, Searle (1990b) stated that commentators on Searle (1990a) had misunderstood his view of consciousness$_4$. He had avoided use of the word *introspection* because he did not believe that one knows one's conscious mental states by some kind of "inner perception" (cf. last several paragraphs of the introductory section of the present article). If consciousness$_4$ were treated of as a process analogous to perceiving, there would be implied a distinction analogous to that between an act of perceiving and an object perceived, but "that distinction cannot in general be made for our own conscious states" (Searle, 1990b, p. 635). Presumably, this distinction is to be excluded because conscious mental states are conscious$_4$ intrinsically; our inner (second-order) consciousness of any mental-occurrence instance is internal to it.

Searle (1989, 1990a, 1990b) has recently been arguing, in effect, that all intentional mental states are conscious$_4$. (Not all mental states are "intentional" in Searle's view; that is, not all of them have intentional or cognitive content, are about or as though about something beyond themselves.) The reason all intentional mental states were claimed to be conscious$_4$ would seem to be (a) *that they cannot possess intentional content without "manifesting" it* (in their very occurrence, according to Searle, i. e., not by somehow being "viewed" or responded to) and (b) as Searle (1990b) stated, using *aspectual shape* for intentional content, "It seems clear to me that within our current nondualistic conception of reality no sense can be attached to the notion that aspectual shape can be both manifest as aspectual shape and yet totally unconscious" (p. 634). This is because there is no aspectual shape without a point of view, without its mattering to the agent, according to Searle (1989, 1990a; Natsoulas, 1992c).

A mental state cannot possess an aspectual shape except *as this is manifested to the individual's point of view.* And, therefore, the mental state must be conscious$_4$; the point of view that Searle had in mind was a point of view *on* the aspectual shape of a mental state, a point of view which necessarily implicates consciousness$_4$. For Searle, inner (second-order) consciousness is

an intrinsic feature of any $conscious_4$ mental state; and the latter's intentional content (aspectual shape), if it has one, must be apprehended.

Conscious Experience Embodies Reflexive Content

Contrary to Rundle (1972; see earlier section above), though without any reference to him, Smith (1989) held as follows:

> More than immediate knowledge of a mental event is required for consciousness. More than a latent attitude of belief is required. A conscious mental event must include an *occurrent* awareness of its own transpiring; the subject must *experience* the event as it transpires. . . . Evidently, the "immediate knowledge" required for consciousness will be some kind of *acquaintance*: a direct cognitive awareness of the given mental event, though not a separate presentation thereof. (p. 81)

This acquaintance is intrinsic to each $conscious_4$ mental-occurrence instance, according to Smith. A subsequent thought or verbal expression of the knowledge that, for example, one saw what one saw or thought what one thought would not serve to qualify the respective visual experience or thought as $conscious_4$, since no direct cognitive occurrent awareness of its occurrence would have taken place as part of its occurrence. Smith (1989) asked, "But how can an *un*conscious recollection of a perception qualify a perception as conscious" (p. 85; cf. comments on Dulany [1991] in introductory section of present article)?

Even when a judgment about a certain mental-occurrence instance takes place simultaneously with the mental-occurrence instance (e.g., a judgment concerning what the latter experience is like), the judgment gives one a kind of external grasp of the mental-occurrence instance, which cannot render the latter $conscious_4$. Indeed, according to Smith, one could not make this kind of ("reflective") judgment about the mental-occurrence instance unless one already had intrinsic acquaintance with the latter. That is, it is a judgment concerning a mental-occurrence instance *in its phenomenal presence*, which means that the instance possesses the distinctive phenomenological quality of being $conscious_4$.

Also, how could this quality of $consciousness_4$ itself be provided by having a second experience (a judgment) that, *ex hypothesi*, does not intrinsically possess the quality and that must in turn, to be $conscious_4$, be an object of a further experience (judgment) that, too, does not intrinsically possess the quality, and so on? (By the way, Smith would interpret "introspection," or the "observation" of one's $conscious_4$ mental-occurrence instances, in terms of reflective judgments about *already* $conscious_4$ experiences.)

Smith (1989) briefly considered, among other alternative hypotheses, that the intrinsic phenomenological property of $consciousness_4$ might be an illu-

sion; that is, it might seem intrinsic though $consciousness_4$ was in fact distinct from the respective $conscious_4$ mental-occurrence instance (cf. Rosenthal, 1986; Natsoulas, 1991a). Smith replied that the latter interpretation depends on a "deep" psychological explanation *which requires evidence.* It is a theoretical account for what seems to be otherwise empirically, phenomenologically, on the "surface."

The phenomenological structure or character of experience is such as to show that inner awareness of each $conscious_4$ experience is a dimension of that very experience. A $conscious_4$ experience's phenomenological structure includes a "reflexive" character, in addition to (*inter alia*) an overall phenomenal quality that is the experience's being "*phenomenally* present in the mind, 'appearing' in consciousness" (Smith, 1989, p 97). To understand Smith's reflexive character of an experience, consider the overall phenomenological structure or content of the following experience as verbally expressed: "Phenomenally in this very experience I see this wriggling snake" (p. 103).

First, *phenomenally* refers to the qualitative character of the experience. Then, *in this very experience* expresses its reflexive content, which is due to the experience's intrinsically including inner (second-order) consciousness of it. As Smith (1989) stated: "My experience of the snake, for instance, has the reflexive character 'in this very experience'; and in virtue thereof, it also has a relation of reference to itself, a successful inner awareness *of* itself" (p. 100). Next, *I* and *see* correspond, respectively, to what Smith calls "the egocentric character" and "the species character" of the experience, about which I make no comment here (see Natsoulas, 1991–1992a, 1991–1992b), except to say that these two characters or parts of the experience's phenomenological structure are parts of what Smith called its "modal content" (see below). And finally, *this wriggling snake* refers to the experience's intentional object, or that which is presented as it is presented by the experience.

One might be tempted to add its own qualitative content to what it is that an experience presents, but Smith (1989) insisted that "an experience is in no way *presented* to itself in inner awareness" (p. 98; italics added). Rather, the experience's being apprehended is a kind of '"modification" of how its intentional object is presented by the experience (cf. earlier discussions of Aristotle and Brentano on inner [second-order] consciousness of perceptual experience).

This wriggling snake expresses the experience's '"mode content," which is *how* the experience's object, that which is presented to the mind in having the experience, is presented in having the experience. As "Phenomenally in this very experience I see this wriggling snake" expresses, in having the experience, the mode content too is apprehended but apprehended as modified by the remaining phenomenological content, called as a whole the experience's "modal content." Only the wriggling snake is seen, in having this experience;

all of the constituents of the experience's phenomenological structure are features of the experience, rather than of its intentional object. Yet there is (nonpresentational) awareness of these features in their roles either of presenting the intentional object (mode content) or of modifying the mode content (modal content).

Basic Awareness Is a Sensation plus Direct Knowledge of It

Hill (1991) recently stated,

> About the nature of introspection, the view that I wish to recommend is a two-factor theory that results from splicing together two different metaphors. The theory postulates an internal scanner that has some of the properties of the human eye, and also claims that introspection has components that are like the processes of adjusting the tuning and turning up of the volume on a radio. (p. 13)

Hill was concerned with explaining the introspective awareness of *sensations*, that is, how basic awarenesses, or states of basic awareness, that have sensations as their objects come to occur. A state of basic awareness can well be thought of as a conscious_4 sensation, that is, a sensory state that intrinsically includes inner (second-order) consciousness of it.

States of basic awareness have as one of their constituents the particular sensation of which they give awareness, which is the object of this awareness. When one is in a state of basic awareness, one has both the sensation and knowledge of the existence of the sensation, knowledge that is caused and confirmed by the sensation. Thus, it would seem, the sensation helps to bring into existence the state of basic awareness of which the sensation is sensory component and object. It seems, therefore, that a conscious_4 sensation is a kind of continuation of the same sensation, which is already occurring, either nonconsciously_4 or already consciously_4.

A state of basic awareness is a passive phenomenon; the components of basic awareness, and basic awareness itself, are not anything that someone does—though Hill speaks of the belief (about the existence of the sensation) involved in a state of basic awareness as being "confirmed" by the sensation (which [a] causes the belief, [b] is the belief's object, and [c] constitutes with the belief a unitary state of basic awareness).

An already conscious_4 sensation (i.e., a state of basic awareness) may be the occasion for taking an interest in the sensation to find out more about it. One introspects the sensation in the mental-eye sense (Hill calls what takes place "inner vision") with the result that a new set of states of basic awareness involving the sensation succeeds the previous ones that were the occasion for one's inner investigation.

I shall not pursue here how Hill's mental eye works to yield states of basic awareness, except to note that "the inner eye hypothesis maintains that

there is a level of representation [i.e., states of an internal scanning device] that mediates between sensations and beliefs about sensations" (Hill, 1991, p. 119). One might also put it that this mediation is a mediation between states of basic awareness, how one set of these states, with a particular sensation as sensory component, is replaced by a new set of such states, including the same sensation and new or different knowledge about it. However, the representational states of the inner eye are distinct from the sensation observed; they are not states of basic awareness or parts of such states. Moreover, they are not the locus of beliefs or knowledge about the sensation introspected. Thus, Hill's understanding of "inner vision" is not the usual understanding according to which the inner (second-order) consciousness (of a sensation) produced by deploying the mental eye is a distinct state from the sensation apprehended.

Also, "volume adjustment" of an existing conscious_4 sensation may occur, by which the intensity of the sensation can be raised and its inner articulation improved. Again, this mental action of "volume adjustment" causes to occur new states of basic awareness of the particular sensation that is the object of introspection. Evidently, a sensation may go on, though suitably transformed, and enter bodily into a succession of states of basic awareness that contain, due to the sensation (plus mental action) as cause, different pieces of knowledge about it.

Along with "inner vision" and "volume adjustment," Hill includes, as part of introspection, "activation." This is a mental action one undertakes (a) in order that a certain nonconscious_4 sensation (believed on indirect grounds to exist, with greater or lesser confidence) might come to be conscious_4 or (b) in order that a sensation that is not now existing might come to exist consciously_4.

In addition to states of basic awareness, which contain knowledge of the component sensory state, there occur what might be called "states of basic erroneous awareness," in which the component belief about the respective sensation is false. Hill (1991, p. 129) suggested (a) it is well established by experiments that people are prone to confuse similar external stimuli, and (b) people would not confuse similar external stimuli if these stimuli produced only sensations that were components of states of basic awareness (knowledge).

Also, which states of basic awareness occur is not merely a matter of the respective sensation's existence and the mental actions that constitute introspection or some form of self-prompting. Which belief about a sensation is formed depends also on the individual's conceptual resources, and the individual may not possess a concept for every phenomenal quality a sensation possesses. Moreover, not all of our concepts that apply to sensations are qualitative, as is the concept of pain; some of the pertinent concepts are highly theoretical and refer to the psychological role which that kind of sensation plays. A particular state of basic awareness need not contain knowledge

about its component sensation as it exists as part of that state (i.e., its intrinsic qualitative character). It may be, conceptually, a highly theoretical state of basic awareness at one extreme or, still conceptually, a purely qualitative such state at the other extreme.

Reflective Seeing Is a Partially Self-Directed Kind of Seeing

Influenced by Gibson (1979), I distinguished two kinds of seeing, between two activities of the visual perceptual system which I am calling "reflective seeing" and "straightforward seeing" (Natsoulas, 1990a, 1990b). Gibson (1979, pp. 195–196) held that, upon adoption of an "introspective attitude" relative to vision, one engages in a different than ordinary visual perceptual activity, which he called "viewing," that gives one visual awareness of the world in perspective; "one notices the perspectives of things." Reflective seeing (viewing) can also take place spontaneously, that is, without one's choosing to adopt a special attitude (cf. Gibson [1966, p. 306] concerning "sensations' obtruding" on straightforward seeing).

Reflective seeing is no less a visual perceptual activity than the activity of straightforward seeing which gives one perceptual awareness only of the environment and of oneself as inhabiting and moving about in the environment. No consciousness of how we are visually experiencing the environment is a product and part of straightforward seeing, as it is of reflective seeing. Because reflective seeing does give one visual reflective awareness (i.e., this kind of inner [second-order] consciousness), it does not follow that reflective seeing is or involves anything different or more than *an activity of the visual system.* Why should it be supposed that the visual system works in only one way, producing and including only one kind of visual experiential stream? In addition to, for example, the activity of visualizing and the activity of straightforward seeing, there occurs the partially self-directed (i.e., directed on visual experience; see below) kind of visual activity of reflective seeing.

By calling reflective seeing an activity of the visual system, I mean to express that reflective seeing consists of far more than just the stream of visual reflective awareness (inner [second-order] consciousness) that is a product and part of this visual activity (Natsoulas, 1989d). Visual awareness of the world in perspective and noticing the perspectives of things requires a special mode of functioning of the visual system. When we adopt, with regard to vision, Gibson's introspective attitude, we put the visual system to work in a distinct way that also involves, as all activities of the visual system involve, parts of it in which no stream of experience flows.

Among much else that consequently happens, there results a stream of visual experience wherein we experience, though now "reflectively," some of the environmental surfaces that we likely have already been visually experi-

encing just before we temporarily altered the visual system's mode of functioning. What are the special contents of reflective seeing, given that its objects in the environment are objects as well of straightforward seeing? What is the difference between visually experiencing something (e.g., a tree, a surrounding environment through which one is driving) in the reflective mode as opposed to visually experiencing it in the straightforward mode?

In a previous article (Natsoulas, 1989e), I stated,

> Gibson (1979) stated that the introspective attitude toward perceptual activity is a "reciprocal, two-way attitude." I am suggesting that the resulting reflective experience is "two-way"; it has content that refers simultaneously to itself and to a part of the environment. When reflectively seeing, one has a kind of "self-intimating" awareness: an awareness making one visually aware not only of something beyond the awareness but also of the visual awareness itself. One apprehends therein a certain relational property of the surface that one is now visually experiencing; namely, one apprehends its property of being the intentional object of this very experience. One visually experiences the surface *as that which one is here and now experiencing*. (p. 463)

Moreover, in being visually reflectively aware of the environment, one discriminates between those surfaces of the environment that are here and now visible to one from those surfaces or parts of surfaces that—though one apprehends them as there behind the surfaces that are unoccluded relative to one's point of observation (cf. Gibson, 1978, 1979, pp. 189–202)—are not visible to one here and now.

One discriminates hidden surfaces from unhidden surfaces by having awareness of unhidden surfaces (a) as themselves visually appearing to one and (b) as obstructing the visual appearing to one of those (hidden) surfaces that, relative to one's point of observation, lie behind the unhidden surfaces. To notice which surfaces are now unhidden from here is to become aware of the content of one's visual experience of them, specifically, whether they are now visually appearing to one. By referring to a surface's visually appearing to one, I do not have in mind that the surface seems to one to be of this or that kind, or to have certain properties, or a certain identity. Rather, I mean to refer to the surface's phenomenally looking to one in a certain concrete visual way, as distinct from how the surface, or even its appearing, is conceptually taken to be. As I previously stated,

> An ecological property may be taken quite veridically yet through a flow of varying appearance. And even when the property appears in a constant way, perceptual awareness may take it differently from one moment to the next. For example, a perceiver may have visual awareness of a surface without noticing the surface's color-texture, though the color-texture may appear to the perceiver throughout looking at the surface, before and after he or she stops noticing the color-texture. (Natsoulas, 1989b, p. 473)

Accordingly, visual experience, whether it be constitutive of reflective or straightforward seeing, has both conceptual (intentional) and qualitative

(presentational) contents. However, these contents are taken notice of only during reflective seeing, not during straightforward seeing—when only the intentional objects of visual experience are noticed (though not as such). During reflective seeing, one apprehends the environment and how one is apprehending it, conceptually and qualitatively, in having visual reflective experience of it.

Instances of Visual Awareness Model Themselves and Their Content

Among the properties of visual perceptual awareness, van Geert (1985) includes its "self-disclosing, self-representing quality." van Geert holds that perceptual awareness is an occurrence of "modeling." Perceptual awareness "models," among other things, "the present perceptual act, including the content of the act" (p. 56). This inner "modeling" or representing is due to the very structure of individual instances of perceptual awareness. Perceptual acts themselves give awareness of themselves (though not, of course, by perceiving themselves, in the ordinary sense of perceiving).

van Geert (1985) stated, "Instances of visual awareness are viewed [by van Geert] as reflexive representations, describing an environment containing an observer to whom the environment-plus-observer qualitatively appears" (p. 49). Thus, instances of perceptual awareness do not simply *include*, as part of their structure, the qualitative appearing of environment-plus-observer; these same instances of perceptual awareness also *represent* this qualitative appearing which partially constitutes them.

What does van Geert mean by qualitative appearing, or "the inherent qualitative properties of perceptual awareness?" He explained as follows, by means of reference to the implications of the sentence "I see X":

> The sentence implies that there is a subject, "I", who is visually presented with X; that the object is presented to "I" in a specific way, viz. in a visual mode, with specific visual qualities, such as perspective, limited direct visibility, colour, etc.; and finally, that what is presented to "I" is not an appearance, but an object (room, scene . . .), i.e. an objective entity that presents itself under a specific qualitative appearance due to the position of "I", the sensory modality employed, the quality of the illumination, etc. (van Geert, 1985, p. 51)

Note that, though the qualitative appearing of aspects of environment-plus-observer is included in and represented by an instance of visual perceptual awareness, what is *presented* in that instance of visual perceptual awareness is not the qualitative appearing but an objective entity "under a specific qualitative appearance."

Thus, the structure of a visual perceptual awareness is constituted, in each case, both by a kind of "description" and by visual appearance. (a) The "description" contained in a visual perceptual awareness is of geometric and

nongeometric properties of the environment, of the part of it that is perceived, including properties of the perceiver, at least his or her present location and movements in the environment. (b) The visual appearance that is included in the structure of perceptual awareness amounts to "how they [these "described" properties] appear qualitatively, i.e., visually, to the perceiver" (van Geert, 1985, p. 66).

In some cases, properties do not visually appear though visual perceptual awareness "describes" them. van Geert mentions as an example the familiar case of an object's other side, which is not visible from one's point of observation, yet one has visual perceptual awareness of the object as having an other side.

In addition, instances of visual perceptual awareness are held to possess a "self-disclosing," "self-referring," "self-representing" property, in the sense that each of them refers to, represents, discloses itself. The "transparent self-reference" that, according to van Geert, characterizes visual perceptual awareness is based on the awareness's qualitative appearential component that was mentioned above and characterized somewhat in a quotation from van Geert (1985, p. 51).

van Geert argued mathematically that the appearential component of an instance of visual perceptual awareness is "computationally equivalent" with that whole instance of visual perceptual awareness, and he explained this equivalence as follows: "A numerically represented visual awareness Va_i contains a subset of numbers, i.e., the numerical values on the appearance dimensions, that is computationally equivalent with the entire numerical representation of Va_i" (p. 71). This means, I gather, that the same visual perceptual awareness can indeed give awareness either of the environment (plus perceiver), or of its own appearential component and thus of itself; therefore, there is no need of a separate mental-occurrence instance for consciousness_4 of one's visual perceptual awareness.

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