

An Introduction to Reflective Seeing: Part II

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After two sections of background discussion regarding (a) some views of inner (second-order) consciousness, ancient, modern, and present-day, and (b) some recent deployments of James J. Gibson's ecological approach to visual perception relevant to our understanding of reflective seeing, I present my own view of reflective seeing for the remainder of the present article. Although I include detailed references to Edmund Husserl's conception of straightforward perceptual consciousness and reflective perceptual consciousness, the present article is not about Husserl. Rather, I use quotations from and about Husserl to add resonance and depth to my own conception of the complex psychological process that is reflective seeing — particularly, the stream of perceptual consciousness that is a product and a part of it, that flows at the heart of reflective seeing. It will be evident that I very largely agree with the Husserl material which I use. And I do not take the space to bring out any disagreements that I might have with him. Thus, this article has as its main purpose making known, in an introductory way, just one, my own, view of reflective seeing.

The topic of the present article is a kind of seeing which I call "reflective seeing." Reflective seeing occurs by means of "the visual system" (Gibson, 1979/1986) no less so than does straightforward seeing. Reflective seeing is suitably called "reflective" given the contents of the visual perceptual consciousness that proceeds at its heart. All reflective visual perceptual contents are not simply of or about that (of the environment or self) which the perceiver sees. Also, they are of or about the consciousness that the perceiver (P) is undergoing in seeing. I began writing at length on the present topic with "Reflective Seeing: An Exploration in the Company of Edmund Husserl and James J. Gibson" (Natsoulas, 1990b). Since completing the main work on that initiatory article, I have continued to pursue the theory of reflective seeing (Natsoulas, 1990a, 1992c, 1993a). Here, I address the contents that P undergoes therein, with special reference to Husserl (e.g.,

1925/1977) on perceptual consciousness. Lately, I have neglected Husserl's enlightening perspective, concentrating instead on how Gibson can help us to develop an understanding of reflective seeing. However, as psychology returns increasingly to consciousness, I expect that Husserl's thought will reveal its usefulness repeatedly. This article provides, *inter alia*, a persuasive idea, I hope, of how Husserl's views can help us to grasp a complex mental phenomenon.

Reflective seeing is a molar activity that includes, as a product and part, a stream of visual perceptual consciousness suitably described in the following way. All along its course, this stream possesses, among others, a dimension of inner (second-order) consciousness. That is, the stream of reflective visual perceptual consciousness is intrinsically so constituted that, throughout its temporal extent, it includes among its intentional objects aspects of the respective visual perceptual consciousness itself. Note my statement that the stream of reflective visual perceptual consciousness is a part, as well as being a product, of reflective seeing. I am suggesting that reflective visual perceptual consciousness is not simply an effect but also contributes to the course reflective seeing may take, performing this function from within reflective seeing itself, at the very heart of this molar activity of the visual system. In particular, reflective visual perceptual consciousness informs P as to what P is seeing now and how it is visual-qualitatively appearing to P from moment to moment. And this consciousness of what is taking place in P's visual system affects how P carries forward the episode of reflective seeing, not to speak of other activities (e.g., reports, locomotions) that are based on inner (second-order) consciousness of being visually perceptually conscious of the environment and self (Natsoulas, 1991, 1992c).

Straightforward seeing resembles reflective seeing in many ways, but straightforward seeing does not possess a dimension of inner (second-order) consciousness. Straightforward seeing proceeds without giving P any consciousness of itself. Straightforward seeing often alternates with reflective seeing, but that is different from giving inner (second-order) consciousness of itself — which is what reflective seeing does, along with giving consciousness of the environment. One can rightly say that straightforward seeing is a non-conscious kind of seeing, but this could be misinterpreted as straightforward seeing's not involving consciousness at all. To the contrary, straightforward seeing, no less than reflective seeing, includes, as part and product of it, a stream of visual perceptual consciousness. Although effects of visual stimulation often occur without any corresponding visual consciousness, such effects are not, on their own, cases of straightforward seeing. And it would be a mistake to consider a creature capable of only the straightforward kinds of perceiving as therefore lacking consciousness of the environment. This point led Dretske (1991) to speak of perception as a conscious process whether or not

it is itself an object of consciousness. Dretske argued to this effect against those holding that consciousness is epiphenomenal vis-à-vis human information processing (e.g., Velmans, 1991).¹

The two streams of visual perceptual consciousness, the straightforward and the reflective, are different. Only one of them possesses content referring to the visual perceptual consciousness involved, or to any of this stream's components. Compare with Smith's (1989) discussion of what he called the reflexive character of all those mental occurrences that are conscious, all those mental occurrences that bodily include inner awareness of themselves. Smith (1989) defined the reflexivity of conscious mental occurrences as follows:

The *reflexive character* of consciousness lies in a special modal structure ascribed, for the case of seeing the snake, in the following form of phenomenological description:

In this very experience I see this wriggling snake.

Within the modal structure of the perception, then, there is a certain indexical content "in this very experience," in virtue of which the experience has a certain reflexive, or self-referential, character. The inner awareness of the experience, in virtue of which it is a conscious mental process, lies in this reflexive character. (p. 99)

Smith introduced the concept of "modal structure"² to avoid implying that P in any way sees a visual experience because it has a reflexive character. Only the snake is seen whether the seeing is conscious or nonconscious. Although the indexical content Smith mentioned may suffice to qualify a mental occurrence as conscious, there is more that P has consciousness of in reflective seeing than simply environmental objects such as the snake; so I shall argue. The objects of inner (second-order) consciousness and perceptual consciousness are not as distinct as Smith implied in his canonical descriptions of conscious experiences (e.g., In this very experience I see this wriggling snake).

¹Compare the present understanding of straightforward seeing with Husserl's (1900/1970) third sense of the word *consciousness*. He characterized this word as "a designation for 'mental acts', or 'intentional experiences', of all sorts" (p. 535). Husserl distinguished the latter concept of consciousness from a different one that refers to "inner awareness of one's own psychic experiences" (p. 543). And he added that the need to assume we have inner awareness of all our instances of consciousness in the third sense "cannot be phenomenologically demonstrated."

²Not to be confused with Michotte, Thinès, and Crabbé's (1964/1991) distinction between modal and amodal perceptual contents, a distinction that I use later in the text.

**Some Views of Inner (Second-Order) Consciousness,
Ancient, Modern, and Present-Day**

Our mental occurrences are typically instances of being conscious of something, whether actual or merely apparent. But I have been occupied as well with our firsthand consciousness of (some of) them themselves. In Natsoulas (1990b), the reasons given for pursuing reflective seeing pertained to the scientific question of how our mental life is (partly) conscious, how there takes place in us inner (second-order) consciousness of our mental-occurrence instances. This is an ancient and unsolved problem. For recent attempts to solve it, see, for example, Armstrong (1968), Bergmann (1964), and Rundle (1972). It is a problem with which Aristotle grappled in *De Anima*, when he argued it is by means of the visual sense itself that we are conscious of seeing what we are seeing, not by a distinct, introspective sense directed on the visual sense —as, for example, Humphrey (1987) has proposed. Aristotle argued that to assign our consciousness of seeing to a separate sense would mean this introspective sense has color as its object, just as seeing does, and that we therefore possess two visual faculties.³

For a while, Freud (1900/1953) included both a perception system and a distinct consciousness system in his psychical apparatus, but he soon postulated a single perception–consciousness system and maintained it for the rest of his career (cf. Laplanche and Pontalis, 1967/1973). Perhaps this change in Freud's conception of consciousness was due to an undesirable implication of his earlier postulation: that, for example, P hears twice every sound P hears, once by means of the perception system and again by means of the consciousness system. The latter system was supposed to receive excitations from the perception system as well as from other, nonconscious systems of the psychical apparatus. The psychical excitations that take place in the perception system or in the consciousness system were considered uniformly conscious psychical processes. In the case of each heard sound, there would be two instances of auditory perceptual consciousness because the perception system would psychically excite the consciousness system very much as it was itself excited by sense-receptor activity. This is, of course, an undesirable implication. My explanation of the change in Freud's theory finds some support in the fact that Brentano (1874/1973), who had taught Freud in these matters, used the duplication of experiences to argue against the idea that what makes, say, an auditory perceptual experience conscious is a separate mental act directed on it.⁴ However, (a) Herzog (1991) has suggested, instead, that

³See Modrak (1987) who discusses some variation in Aristotle's understanding of inner (second-order) consciousness.

⁴Recently, Grossmann (1984) sought to turn this argument against Brentano's conception of inner (second-order) consciousness.

Freud's combining his perception and consciousness systems into a single perception-consciousness system was due to a progressive loss in focus regarding the relation between consciousness and perception, after Freud abandoned work on *Project for a Scientific Psychology*. And (b) Gill (1963) regretted a consequence of Freud's integrated perception-consciousness system: that all perceptual experiences are conscious. In my view, this consequence was already present in Freud (1900/1953), since all psychological processes of the perception system were supposed to be sensory-qualitative and, therefore, conscious. Throughout Freud's work, qualitativity in this sense and inner (second-order) consciousness constituted a single intrinsic property of all conscious processes.

In our own time, we have, for example, Skinner (1964) arguing, in contrast to Aristotle, that "seeing that we see" is a verbal matter, a matter of emitting operant behavior that describes or identifies as such our current instances of seeing X or Y. According to Skinner, we would lack any awareness of our seeing, thinking, feeling, and so on, had our verbal community not taken an interest in operantly conditioning us to issue appropriate responses under the internal circumstances (so far as the verbal community could infer these from behavior and how our sense receptors were stimulated). Skinner's account implies we could survive on earth absent all inner (second-order) consciousness.

In James's (1890) words, how is it that our mental life consists of consciousness, rather than merely of sciousness? Sciousness, as James explained the concept, would give us immediate awareness only of what lies beyond our mental life. If, indeed, our mental life consisted entirely of sciousness, we would have to infer the occurrence of anything mental that occurred in us. Having raised the question of whether our stream of mental life consists of instances of consciousness as well as instances of sciousness, James proceeded on the assumption that we do indeed have inner (second-order) consciousness of much of our mental life, even stating (a little earlier in the book) that such consciousness is habitual in the adult human being. James's account of inner (second-order) consciousness was of the appendage variety, which I have criticized elsewhere (Natsoulas, 1992a, 1993c). According to James, a mental-occurrence instance that is conscious is succeeded in the stream by a mental-occurrence instance that has the first mental-occurrence instance for its intentional object (cf. Rosenthal, 1990). It may seem as though we are conscious of a mental-occurrence instance in its very occurrence, but James would explain this starting from the similarity of contents between a mental occurrence and awareness of it (Natsoulas, 1992-1993).

Inferring was, in fact, what Hebb (1980) argued we must do if we are to know anything at all about our mental life; in his view, there is no way by which the mind can know itself directly. Directness would require, Hebb

argued, a perceptionlike mechanism directed on the brain, which in fact does not exist. To introductory psychology students and others, Hebb repeatedly insisted, "You are not conscious of your consciousness."⁵ Therefore, there was no point in his students' and colleagues' trying, from their purportedly authoritative position as subjects of their own mental life, to tell Hebb what took place in their minds. Their epistemic relation to their own mental life was fundamentally the same as the epistemic relation to it of "a psychologist of the other one." Both subject and scientist can only tell what is taking place in someone's mind, including one's own, by observing the particular individual's behavior, including its environmental and bodily circumstances, and drawing inferences about the mental from what was observed. For criticism of Hebb's position, see Bruner (1982), Natsoulas (1983), and Puccetti and Dykes (1978). Also relevant are a discussion by Findlay (1966, pp. 168–170) and Johannes Daubert's statement: "One cannot read off from the face of a thing that it is intended [i.e., mentally apprehended] by us" (quoted by Schuhmann, 1989, p. 55).

Under the name unconscious intentional zombie, Searle (1990) rejected the possible existence of a creature that has a mental life but lacks all immediate awareness of it. Searle held that all content possessed by mental-occurrence instances is essentially subjective. A creature sans inner (second-order) consciousness would have no point of view on its mental life and therefore could have no mental life. In contrast, I believe Rosenthal (1990) would see no problem in principle with applying the characterization unconscious intentional zombies to human beings in general — so long as this characterization allows that people's inferences about their own mental life often occur unbeknownst to them, that is, so long as one grants that people often lack any thought to the effect that a particular awareness of their mental life that does occur is based on inference. I draw this implication from Rosenthal's higher-order thought theory of inner (second-order) consciousness. According to this theory, a mental-occurrence instance, including an instance of straightforward visual perceptual consciousness, is conscious if (a) the individual has a thought about the mental-occurrence instance that "asserts" its occurrence in him or her and (b) has no additional thought to the effect that having the other thought occurred as a result of inference, though it may well have. On Rosenthal's account of inner (second-order) consciousness, see Natsoulas (1992a, 1993c).

⁵Cf. Rachlin (1985); and Dunlap (1912, pp. 410–411): "I am never aware of an awareness How do I know that there is awareness? By being aware of something."

Some Deployments of Gibson's Visual Perception Theory Relative to Reflective Seeing

As mentioned, my efforts with regard to reflective seeing have proceeded largely with reference to Gibson's ecological approach to perception. Let me identify these recent deployments.

1. I have used Gibson's ecological approach to place reflective seeing in a larger, naturalistic context of cogent psychological theorizing on visual perception in general (Natsoulas, 1992c, 1993a). Reflective seeing is not a metaphorical kind of seeing — as when a phenomenologist writes of having one's eye or regard on a mental process. Contrary to Humphrey (1987), for example, there is no inner eye by which we scan our mental life. The perceptual consciousness (including its dimension of inner [second-order] consciousness) that is a product of reflective seeing goes on in the visual system itself. I should mention, too, that it was Gibson's (1979/1986) conception of *environmental "viewing" with an introspective attitude* which led me to the concept of reflective seeing. Here is how I first began to spell out this concept from a base in his theory (Natsoulas, 1983):

We learn in this way what is seen now, which surfaces in our field of vision are actually visible to us from here [Gibson, 1979/1986]. We are aware of the stimulating environment as content of our visual perceptual awarenesses. Taking an introspective attitude on our own seeing, we have direct access to visual contents by "attending to how what we perceive looks to us, from our particular point of view, in our particular psychological and physiological state" (D. Locke, 1968, p. 26). This is what introspecting our seeing amounts to. In the same way, Rock (1975) identified introspection in a recent textbook of perception as the examination of our experiences. In the case of perception, he stated, such an examination takes the form of "noting the perceptual appearance of objects and events." (p. 441)

2. Despite the absence in Gibsonian theory of more than minimal attention to visual perceptual consciousness per se, the theory does leave a place in its overall structure where visual perceptual consciousness can be compatibly and usefully inserted; so I have argued (Natsoulas, 1984, 1992c). In this regard, I have called attention to, among other things, Gibson's (1979/1986) distinction between (a) his theory of the process of perceiving and, as he called it, (b) his "new notion of perception." According to the latter, perception per se is "an experiencing of things rather than a having of experiences. It involves awareness-of instead of just awareness" (p. 239). Gibson likened his new notion of perception to that of the act psychology of the nineteenth century (presumably, Brentano [1874/1973]). Let me not argue again the place of visual perceptual consciousness in Gibson's perception theory. Let me just express my contention that followers of Gibson's ecological approach cannot consistently maintain that awareness-of takes place at the interface between

P and the ecological environment that surrounds P, as opposed to its taking place within P's visual system (Natsoulas, 1993b).

3. Also, I have tried to introduce into Gibson's visual perception theory, that dimension of consciousness which is the perspectival appearing of the ecological environment (Natsoulas, 1990a). Here, in part, is how I summarized what I was proposing:

In the present article, perspectival appearing is located at the level of brain centers of the visual system, where processes are determined by the spatiotemporally structured visual stimulus flux. And the stream of visual experience is interpreted as itself possessing a kind of perspective structure (as does the visual stimulus flux), including variant and invariant features that the visual system isolates and extracts from experience producing the perceiver's cognitive visual "awareness-of" (Gibson, 1979/[1986]) the environment and self in the environment. (p. 291)

In introducing the dimension of perspectival appearing into Gibsonian theory, one of my purposes was, as it continues to be, to contribute to explaining the special way in which P is conscious of the ecological environment during reflective seeing. In Husserl's terms, perspectival appearing is a real, not a merely intentional, content of both straightforward seeing and reflective seeing. Husserl (1913/1983) stated, "The *appearing* of the color, of the sound, and thus of any quality whatever of the object [e.g., of a tree trunk] belong to the 'really inherent' composition of the mental process" (p. 238). P has consciousness of this real content (i.e., the appearing itself) only during reflective seeing. In what does this content consist? And how do we have consciousness of it, and not merely of that part or aspect of the ecological environment which the appearing is of?

4. Perspectival appearing of the ecological environment is not, of course, the only dimension of visual perceptual consciousness, but it is a crucial dimension. In the absence of perspectival appearing, visual perceptual consciousness would be, if one can imagine it, totally amodal in Michotte's sense. Michotte and his colleagues described (amodal) cases of visual perception in which experimental subjects have visual perceptual consciousness of something (X) in the environment without X's visual-qualitatively appearing to them (Michotte, Thinès, and Crabbé, 1964/1991). That is, P has visual perceptual consciousness of X in a sort of formal, abstract manner, without X's having any qualitative presence. An amodal perceptual consciousness of X would lack anything like those nuclear hyletic data whereby, according to Husserl (1925/1977, p. 127), X itself is made visually present to consciousness — as the palm of your hand may be visually present to your consciousness now if it is facing your point of observation.

Gibson (1979/1986) too proposed, in effect, that a good portion of our everyday straightforward seeing is amodal, since there is much that we have visual perceptual consciousness of when those particular (occluded) parts of

the environment are not projecting light to our point of observation. Gibson (1979/1986) stated, "What is seen at this moment from this position does not comprise what is seen" (p. 195). He meant those environmental surfaces that P can literally be said to be seeing at the moment, those now visual-qualitatively appearing to P are not the only environmental parts of which P is now having visual perceptual consciousness. Similarly, Husserl (1938/1973) pointed out something analogous about our auditory perceptual consciousness of a ringing sound that is continuous and unchanging: "But the apprehending regard is not directed toward the *phase* actually sounding now, as if the sound were purely and simply the sound taken in this strictly momentary now" (p. 107).

However, as I have argued (Natsoulas, 1992c), it hardly follows from (a) the fact that P has visual perceptual consciousness of some things amodally (b) that any instance of visual perceptual consciousness of the environment is amodal: "Rather, in the case of all visual phenomena called 'amodal,' P has modal visual awareness of something else at the particular location in P's field of view . . . corresponding to where P takes the amodally perceived property to be" (p. 168). To have amodal visual perceptual consciousness of something is not equivalent to having amodal visual perceptual consciousness; that is, P has amodal consciousness of X in having *modal* visual perceptual consciousness of a part of the environment that includes X.

5. Recently, I discussed at same length Michotte's and Gibson's (1979/1986) interpretations of the visual-perceptual laboratory phenomenon called the tunnel (or screen) effect (Michotte, Thinès, and Crabbé, 1964/1991). I argued that reflective seeing is a crucial ingredient of this laboratory effect, since the experimental subjects have visual perceptual consciousness of the moving object as going out of sight behind a screen, as being in motion while out of sight behind the screen, and as then coming back into sight from behind the screen (Natsoulas, 1992d). In sight, out of sight — these are relational properties of an environmental object or surface, properties of which P has no visual perceptual consciousness while engaged merely in straightforward seeing. This may be a difficult point to grasp. During straightforward seeing, one can only have visual perceptual consciousness of the moving object as moving at a certain speed across the display and on the farther side of the screen during the middle phase of its trajectory, and other purely objective properties of the moving object; that is, the contents of straightforward visual perceptual consciousness make reference exclusively to what lies beyond the straightforward seeing itself. As Husserl (1925/1977) stated:

If we are experiencing in a straightforwardly noticing manner and are looking purely at what is and is such and such in space, everything which comes to be laid hold of in this manner offers itself just as pertaining to spatial things, the shape as shape of the thing, a quality pertaining to it in movement and rest, in change and permanence;

likewise also, color as spreading over the spatial figure and thereby over the thing itself, qualifying what is objective in space. Nothing at all subjective falls within our mental sphere of vision. (p. 116)

In contrast, to take notice of what is in one's sight as being so, or of what is out of one's sight as being so, is to take notice, by seeing, of something partly subjective and, therefore, this requires reflective seeing. To tell that something is now in one's sight or out of one's sight or partially so, one must take notice of what is now visually appearing to one. Therefore, my interpretation of the tunnel effect would seem compatible with Gibson's ecological approach provided his approach can rightly be taken to include, during viewing (reflective seeing), visual perceptual consciousness that has as its object the visual-qualitative appearing of parts of the ecological environment. Cutting (1986) did so take it, stating that Gibson's theory in essence holds, "Things look as they do because information in the optic array [of light] specifies that appearance to our visual system, which has evolved to pick up that information and see things in given ways" (p. 295).

A View of Reflective Seeing

The remainder of this article expresses only my own view of reflective seeing. This view resembles Husserl's in a number of important respects. I shall make use of sentences and passages from and about Husserl's writings. My purpose in using this material is to provide resonance and depth to my own contentions, and to stimulate and inspire the development of my understanding of reflective seeing in directions that I might not, on my own, have thought to take. However, I shall not engage in an examination of Husserl's relevant views, nor argue against the ones with which I disagree. I ignore the latter in the interests of making known here just one perspective on reflective seeing.

Is a Shift in Visual Activity from Straightforward Seeing to Reflective Seeing an Uncommon Occurrence in Everyday Life?

Suppose P's visual system has been functioning for a while in the mode of straightforward seeing; and now, for whatever reason or cause, P's visual system begins to function in the mode of reflective seeing instead. This change in visual activity is not, I suggest, anything unusual in P's daily life; it takes place many times in a single day and hour. Among other activities of the visual system, straightforward seeing and reflective seeing alternate — which implies, of course, that only one of these two molar activities can occur at any one time in a single subject. With a shift from straightforward seeing to reflective seeing, straightforward seeing is no longer taking place. I want to

emphasize that, in my view, reflective seeing *does not* consist of straightforward seeing plus something else that gets added on (i.e., an appendage) to it rendering it an episode of reflective seeing (cf. Natsoulas, 1992a, 1993b). That would constitute an appendage view of reflective seeing. Reflective seeing would consist of an apprehension of straightforward seeing from outside the latter, a kind of response to it or distinct inner awareness of it; whereas my view of reflective seeing is an intrinsic account: straightforward seeing and reflective seeing are intrinsically different kinds of seeing.

Compare with Husserl's thesis that the mental intentional object of reflective seeing, as distinct from its environmental intentional object, is internal to the visual perceptual consciousness involved in reflective seeing. McKenna (1982) expressed Husserl's thesis as follows:

It is quite clear from the context of Husserl's [1913/1983] remarks that by the "existence" of the [mental] object of reflective perception he means not only that the experience perceptually reflected upon is "really lived" and exists "now," but that it is actually itself there in the reflective perception. (p. 95)

That is, the mental object of reflective perception is literally a part of the reflective perception itself. Note that McKenna was here using the term reflective perception to refer to any instance of inner (second-order) consciousness, not to reflective seeing alone (as it might seem given the context of the present article). Husserl's thesis applies to all conscious mental-occurrence instances, including of course the instances of visual perceptual consciousness that are involved in reflective seeing. All conscious mental-occurrence instances are included bodily in the respective inner (second-order) awareness of them; more exactly, I would say, all conscious mental-occurrences possess, as an intrinsic dimension, inner (second-order) consciousness of themselves. There will be more later on this same point which McKenna emphasized.

Simultaneous activities? However, might not straightforward seeing and reflective seeing occur simultaneously in a single individual, and not in the sense that one of them is a component of the other? This possibility does not seem to me to be out of the question, notwithstanding my view that both kinds of seeing are molar activities of the visual system. I have in mind the following considerations: (a) we do have two cerebral hemispheres — many authorities speak of our each having two brains, each with its own visual cortical areas (Cook, 1986); (b) given what has already been discovered (e.g., Sperry, 1982) concerning people who have undergone therapeutic surgery that disconnects at the cortical level their two cerebral hemispheres from each other, it would not be surprising to learn that the cerebral hemispheres of a fully commissurotomized person can each instantiate, at the same time, a different kind of molar activity of the visual system; and (c) some prominent

neuroscientists who specialize in psychological research on commissurotized people and related topics are proposing that the two cerebral hemispheres can function relatively independently of each other also in the intact, healthy, undrugged individual. According to Gazzaniga (1988), this is not really a new view among researchers on commissurotized people: "Most prior studies have been carried out in the belief that each half-brain is a functioning, independent system that operates no differently than when connected" (p. 42). However, in the present article, I shall not take into account the possibility of dual consciousness in the normal human being; I shall tentatively assume an intact, normally functioning individual can be engaged at a time in only a single molar activity of the visual system.

The uses of reflective perceptual contents. If I am right, reflective seeing occurs extremely frequently in ordinary life. Specifically, P finds it useful to consult the contents of his or her visual perceptual consciousness repeatedly, if not continuously, while P is engaged in ordinary tasks whose execution depends on having visual perceptual consciousness of the ecological environment (Natsoulas, 1992b, 1992c). Compare this last statement with Gibson's (1979/1986, Chapter XIII) discussion of the functions of vision in P's locomoting through the environment and in P's physically manipulating environmental objects. In that chapter, Gibson discussed what is required, on the perceptual side, in order for P to control his or her locomotions and manipulations on a visual basis. Taking Gibson's implicit lead (see his chapter), I have recently argued, in effect, that reflective seeing is a necessary ingredient of P's controlling his or her active locomotor behavior on a visual basis (Natsoulas, 1991). For P to know how to move under the circumstances (direction, speed, etc.), P must take notice, as he or she moves, of the changes that P thereby produces in the environment's visual-qualitatively appearing to him or her. As Reed and Jones (1982) partially stated Gibson's view in this regard: "To see one's position and movement within the environment involves seeing what is out of sight from here, and also seeing how to move to make it come into sight" (p. 117).

Relevant here are (a) my earlier comments on what must be involved in having visual perceptual consciousness of something's going out of one's sight or coming into one's sight and (b) McKenna's (1982) following statement of a part of Husserl's theory of perception:

There is a field of visual hyletic [i. e., sensory] data which correlates with the visible sector of the world. Among other things, this hyletic field contains correlates to the spatial structure of what is perceived. An indication of this can be grasped from the following example. When driving in an automobile down a narrow road lined with trees that are in full bloom you may notice, if you let your attention stray from its absorption in the road and your movement down it, that you are experiencing the whole visual field in front of you opening up or parting and streaming on your right and left sides in a way similar to what you see when water in a river flows around a

rock. As part of this phenomenon, the "road" seems to widen rapidly as it approaches and flows around you (or, if you look out the back window of the car, you can detect the experience of the whole space being "sucked in" towards a central point). These phenomena are changes in what is called the "quasi-space" of the visual hyletic field. The experience of hyletic changes like this at some level of consciousness, according to Husserl's theory, is necessary for the experience of being in and moving in an objective space. (p. 192; cf. Gibson, 1979/1986, Chapter XIII; Natsoulas, 1991)

Recognizing reflective seeing when engaged in it. A shift in P's visual activity from straightforward seeing to reflective seeing can occur deliberately or automatically, that is, with or without P's choosing to engage in reflective seeing, either as such or in another guise. There are situations or conditions that bring reflective seeing into play simply due to its past usefulness. P sometimes finds himself or herself engaged in reflective seeing, though P did not have any intention to be so engaged at this time. At other times, P engages in reflective seeing without the recognition that reflective seeing is what he or she is doing. Instead, P will describe his or her episode of reflective seeing as though it were a case of straightforward seeing of some kind — since nothing unusually reflective or introspective, it seems to P, is taking place with reference to his or her visual activity. What seems to P to be taking place is no more than the ordinary seeing with which P has for so long been intimately familiar.

But, in fact, P has not been intimately familiar with straightforward seeing, for the obvious reason that the stream of straightforward visual perceptual consciousness lacks any dimension of inner (second-order) consciousness. As Husserl (1929/1960) stated: "Perceiving straightforwardly, we grasp, for example, the house and not the perceiving. Only in reflection do we '*direct*' ourselves to the perceiving itself and to its perceptual directedness to the house" (p. 33). Whatever we may know about the stream of consciousness that is a product and part of straightforward seeing, we know only by inference.

But this is not recognized. People think, instead, that straightforward seeing remains on hand, persisting just as it is, that it is something like an external object to which we can turn our attention when we want. Recall the tunnel effect, which I mentioned in an earlier section. A number of psychologists and others skilled in scientific observation visited Michotte's laboratory and had the tunnel effect demonstrated to them as subjects. But how many of these people reported to Michotte and his associates something along the lines of what I have argued, namely, that the tunnel effect is a phenomenon of reflective seeing, that in the absence of reflective seeing the key feature of the tunnel effect, which is the object's being hidden from P's view for part of its trip across the display, would not be noticed by P? There was no mention of such a report, although, as Husserl (1929/1960) rightly stated, "Natural reflection alters the previously naive subjective process quite essentially; this process loses its original mode, '*straightforward*',"

by the very fact that reflection makes an object out of what was previously a subjective process but not objective" (p. 34). The failure to report the occurrence of reflective seeing as such, when reflective seeing is essential to a consciousness of the particular perceptual phenomenon, strongly suggests that, owing to its great commonness, reflective seeing is routinely mistaken for straightforward seeing.

Looking harder. That reflective seeing often takes place unintentionally and unrecognized as anything reflective would help to explain psychologists' tendency to view reflective seeing as less common a visual activity than it actually is. In their own lives, people in general will seldom set about to engage in reflective seeing *as such*. When they do undertake to engage in reflective seeing, they will often consider themselves to be merely looking with greater attention or more closely at something in the environment. In the following statement, Perkins (1983) would seem to be claiming that something along the latter commonsensical line is what actually does occur in reflective perceiving, that reflective perceiving is no more than a more whole-hearted case of straightforward perceiving:

To give our auditory attention to the content of our [auditory perceptual consciousness, i.e., to the content of our] involuntary, perceptual attribution of an auditory quality to something before our ears is to give our attention to this something that is before our ears. For our attending to the content of our own "act" of attribution amounts to nothing less than our entering whole-heartedly into our own [auditory perceptual consciousness, i.e., into our] own involuntary, aural-perceptual attribution of an auditory quality to something before our ears. (p. 195)

However, people who are visually attending more strongly or closely are typically engaged in reflective seeing, since their visual perceptual consciousness itself is of interest to them under the present circumstances. That is, it is of interest to them *how exactly they are visually experiencing what they are visually experiencing* as they look at a part of the environment more closely or with greater attention. They are, as it were, *interrogating* their visual perceptual consciousness for what it can tell them more relevantly, more specifically, more truly, or more exactly about that which they are now seeing.⁶ To question one's visual perceptual consciousness for its veridicality requires that one have inner (second-order) consciousness of it. If looking harder consisted of just more or better straightforward seeing, one's visual perceptual consciousness, however veridical and precise it might become as a result of the effort, would still not have reached the threshold, so to speak, of now being an intentional object of inner (second-order) consciousness.

⁶Cf. O'Shaughnessy's (1972) discussion of "the correct occurrent epistemological posture" that P must adopt toward the part of the environment that P is visually perceiving, when it is P's purpose to come to believe only what is true about that part of the environment.

My view finds support in Husserl's (1938/1973) discussion of paying attention to what exists, of adopting a firm orientation on an object, as being an activity in which the ego engages and which involves a striving that Husserl described as follows:

It is not only a progressive having-consciousness-of but a striving toward a new consciousness in the form of an interest in the enrichment of the "self" of the object which is forthcoming *eo ipso* with the prolongation of the apprehension . . . Its aim is to convert the appearance (figuration) which the ego has of the external object into other and again other "appearances of the same object." . . . [It] aims at transforming this something in the how of one mode of appearance to the same something in the how of other modes of appearance. (pp. 82-83)

I would say that, in engaging in this activity, P must take interest in the visual-qualitative appearing of the object, since this appearing constitutes at least a subgoal of that activity. In fact, how can one know that one is succeeding in one's effort to look more closely or more completely at a particular environmental object unless one has inner (second-order) consciousness of the visual perceptual consciousness that one is having of it while engaged in the activity?

The frequency of reflective seeing. The actual frequency of reflective seeing will turn out to be, I believe, of a magnitude that will astonish all those who concern themselves with issues pertaining to inner (second-order) consciousness (Natsoulas, 1991, 1992b). Especially discomfited will be psychologists who repeat what has become a traditional maxim of our field: namely, that inner (second-order) consciousness normally comes into play when an obstacle to behavior is encountered. It seems that we are unconscious intentional zombies, according to these psychologists, for as long as we can manage it and achieve our goals. When we are stymied, we snap out of our completely straightforward mental condition and begin to take notice of our feeling what we are feeling, of our thinking what we are thinking, of our seeing what we are seeing, and so on. These mental occurrences, whose nonreflective counterparts we were undergoing all along, begin to matter to us subjectively when we have to find or choose a new path to our goal. Indeed, many psychologists will tend to agree with Delius's (1981) following extreme statement: "In general, in the context of everyday life and during the pursuit of practical concerns, when attending to what we visually observe, to what goes on in our field of vision, we are completely oblivious of ourselves and of our 'performing acts of seeing'" (p. 17).

In opposition to this purported obliviousness, let me add the following to what I have already suggested in the preceding subsection. It would seem to be an unquestionable fact that we typically know that we are now seeing what we are now seeing or, at least, that we are seeing something, however vaguely or inadequately specified. If straightforward seeing were the rule, as it

is sometimes suggested, while reflective seeing were the exception, how could we know, in our own case, that this was true? Relatively infrequently do we find ourselves behaving without perceptual consciousness relevant to our specific behavior. And based on our visual perceptual consciousness, of which we have had inner (second-order) consciousness innumerable times, we recognize as valid Husserl's (1913/1983) following description of the "experiential background."

In perceiving proper, as an attentive perceiving, I am turned toward the object, for instance, the sheet of paper; I seize upon it as this existent here and now. The seizing-upon is a singling out and seizing; anything perceived has an experiential background. Around the sheet of paper lie books, pencils, an inkstand, etc., also "perceived" in a certain manner, perceptually there, in the "field of intuition;" but, during the advertence to the sheet of paper, they were without even a secondary advertence or seizing-upon. They were appearing and yet were not seized upon and picked out, not posited singly for themselves. Every perception of a physical thing has, in this manner, a halo of *background-intuitions* (or background-seings, in case one already includes in intuiting the advertedness to the really seen), and that is also a "*mental process of consciousness*" or, more briefly, "consciousness," and, more particularly, "*of*" all that which in fact lies in the objective "background" seen along with it. (p. 70)

When we are seeing, we do indeed know *that* we are seeing; and we know, more or less specifically, under some description, however vague and partial and partially erroneous, what we are seeing. This is because the seeing with which we are so greatly familiar consists, actually, of instances of reflective seeing. Yet we go on thinking of reflective seeing as though it were something else, something exotic that requires special effort, training, and circumstances. It is straightforward seeing which should seem to psychologists the more mysterious of the two kinds of seeing.

The Ordinary and Common Shift from Being Engaged in Straightforward Seeing to Being Engaged in Reflective Seeing

A shift in the functioning of the visual system from straightforward seeing to reflective seeing does not mean that P's stream of visual perceptual consciousness has been interrupted; after all, seeing is still going on after the shift. However, whether the same stream continues uninterruptedly right through the shift is a question to which I shall shortly return. A shift to reflective seeing is not a shift to the functioning of a different perceptual or other system, nor is it a matter of bringing an additional system into play. With the intervention of reflective seeing, there is now going on a different activity of the visual system itself than was proceeding just before, but the successor visual activity also has at its core a stream of visual perceptual consciousness of the ecological environment. And it can be much the same part of the environment that P continues to be visual-perceptually conscious of,

from before to after the shift in visual activity. At the same time, this visual perceptual consciousness during reflective seeing possesses different content than does the preceding episode of seeing or, for that matter, than does any episode of straightforward seeing. That is, P continues to have visual perceptual consciousness of the same part of the environment but P is now conscious of it in a different way. P has a consciousness of it that cannot take place during straightforward seeing, given the kind of seeing that straightforward seeing is. On the latter point, see the indented quotation from Husserl (1925/1977, p. 116) that I included earlier in this article, as well as the following statement from the same source: "In the unqualified experience of a thing nothing subjective as such is found. Our entire subjectivity remains so to speak anonymous to itself" (p. 112).

Individual mental-occurrence instances belonging respectively to the two streams. Therefore, the following two sentences from Husserl, with which I am in full accord, may seem partly to contradict what I have been suggesting takes place with a switch from straightforward seeing to reflective seeing.

Natural reflection alters the previously naive process quite essentially; this process loses its original mode, "straightforward," by the very fact that reflection makes an object of what was previously a subjective process but not objective. (Husserl, 1929/1960, p. 34)

An already given mental process or really immanent Datum thereof (one not modified reflectively) undergoes a certain transmutation precisely into the mode of consciousness (or object of consciousness) reflectively modified. (Husserl, 1913/1983, p. 178)

The following crucial distinction is the part of my view that these two sentences from Husserl may seem to contradict.

In the kind of shift in seeing that I have been considering, there are involved two successive streams of perceptual consciousness. Psychologists should conceive of them as distinct from each other, though one of them, as it were, turns into the other one, at those points where straightforward seeing gives way to reflective seeing, or vice versa. These two streams of perceptual consciousness, namely, the reflective perceptual stream and the straightforward perceptual stream, are each a part and product of a different molar activity of the visual system. Therefore, no particular mental-occurrence instance that belongs to one of these streams can be transmuted, that is, can either become, in Husserl's term, reflectively modified or cease to be reflectively modified.

Either it is or it is not reflectively modified in the first place; by which, I do not mean that it has already been transformed or changed in any way. If a mental-occurrence instance is part of the reflective perceptual stream, then it is, perforce, intrinsically reflectively modified. If any mental-occurrence

instance is part of the straightforward perceptual stream, then it is not reflectively modified; since straightforward seeing does not produce a stream of consciousness including any mental-occurrence instances that are, have been, or will be reflectively modified.

If one wants, nevertheless, to think in terms of a single stream of visual perceptual consciousness that flows on, through different molar activities of the visual system as these activities succeed each other, then one can speak of this single stream as modified, reflectively or otherwise, at those points where one kind of molar visual activity is succeeded by another kind. This is consistent with Husserl's (1913/1983) general thesis that any reflection is a modification of a consciousness, and that any consciousness can be modified.

In my view, this modification is a part and product of replacing the molar mental activity that is producing the present stream of consciousness. The crucial way in which the stream of visual perceptual consciousness gets modified when reflective seeing intervenes is that the mental-occurrence instances that now comprise the stream are each of them an instance of reflective visual perceptual consciousness. They are such not because they have been modified in the sense of their having been changed from what they were before, but because the functioning of the visual system has been modified so that it is now, and for as long as reflective seeing lasts, producing instead instances of reflective visual perceptual consciousness, rather than instances of the straightforward kind. It is the visual system that could be said to have been reflectively modified, in the sense that it is now functioning in the mode of reflective seeing.

What Are the Intentional Objects of That Visual Perceptual Consciousness Which Is a Product and Part of Reflective Seeing?

Now, the following passage from the same source is also very much on the mark, though it, too, could be misinterpreted in the way that I mentioned above. Husserl (1925/1977) stated,

If I pass over reflectively in the first and natural manner from the straightforward object-perception to the modes of givenness [of the object], then [the modes of givenness] are perceived, noticed in their subjective existence. But the object itself also continues to be perceived and noticed, although it is not what is exclusively noticed, as when I am directed straightforwardly toward it. What I now grasp is the object as appearing in this or that *how* of its mode of appearance; or vice-versa, the mode of appearance is preferred as the main theme, but still as a mode of appearance of the object which so to speak is still in our grasp and remains in its previously posited actuality. (p. 129)

At the point of the switch from straightforward seeing to reflective seeing, the particular environmental object (X) continues to be an intentional

object of P's stream of visual perceptual consciousness, as it was prior to the switch from straightforward seeing. But now, in addition, P takes notice of *how* X is the intentional object of this instance of visual perceptual consciousness, *how* he or she is visual-perceptually conscious of X.

In reflective seeing, P has (reflective) visual perceptual consciousness of both of the following items, simultaneously and in relation to each other: (a) X and certain of its properties that may already have been taken notice of during straightforward seeing, and (b) the visual-qualitative appearing to P of the part of the environment that is now projecting light into P's eyes. Since X, together with some of its properties, is a subpart of the part of the environment mentioned under (b), since X is a subpart that is facing P's photo-receptors, X, together with some of its properties, is also visual-qualitatively appearing to P, along with whatever else lies within P's field of view and is facing at some angle P's point of observation. The reason that a single unified consciousness of both (a) and (b) above is possible is that a consciousness of how X is appearing is a consciousness of X as well, since a consciousness of how X is appearing is itself an appearing of X; that is, this reflective visual perceptual consciousness includes bodily the processes that constitute the qualitative presence of X.

Note that the visual-qualitative appearing of X to P is not new with reflective seeing: it also took place in straightforward seeing, but P did not have any consciousness of how X was appearing while P was engaged in straightforward seeing (i.e., during what was in fact straightforward seeing, rather than merely taken by P as being that).

A contrast in content. To be conscious of the visual-qualitative appearing of X is perforce to be visual-qualitatively conscious of X. Though not conversely; that is, P's having visual perceptual consciousness of X, as occurs in straightforward seeing, does not involve P's taking notice of the appearing of anything. It is important to realize that, whereas the visual-qualitative appearing to P of a part of the environment is a part of the perceptual content of the visual perceptual consciousness that proceeds during straightforward seeing, only P, and its properties, and other parts of the ecological environment, and not the above perceptual content, or any content, is something P has consciousness of during straightforward seeing. As Husserl (1913/1983) would say, P lives his or her straightforward visual perceptual consciousness and all its components, and lives them without "seizing upon them in the manner characteristic of an experiencing of something immanent or of any other intuiting or objectivating of something immanent" (p. 174; cf. Husserl, 1925/1977, p. 117). P does not have any consciousness of them at all, though they are no less, for P's only living them, a part of P's visual perceptual consciousness.

Note that X, being an environmental entity, is not anything immanent in P's consciousness of it; and, therefore, no reflective activity is necessary in

order for P to have consciousness of X on the spot. When P is conscious of the visual-qualitative appearing of X, as does take place in reflective seeing, the content of the visual perceptual consciousness of X differs from the content during straightforward seeing of X, notwithstanding the fact that the straightforward seeing of X includes — in this modal case (see modal–amodal distinction [Michotte, Thinès, and Crabbé, 1964/1991] mentioned in an earlier section) — the visual-qualitative appearing of X as part of its content. That is, P is conscious of X in a different way; P is not simply conscious of X as occupying a particular location and possessing certain other nonsubjective properties. Rather, P is conscious of X as visual-qualitatively appearing to P in the particular concrete way that it is visual-qualitatively appearing to P. During reflective seeing, not only is P conscious of X as visual-qualitatively appearing (i.e., the fact of X's appearing), but also P is conscious of X's visual-qualitative appearing itself (i.e., how X is appearing). Reflective perceptual consciousness always has at least two different kinds of intentional objects, and has them, simultaneously and in relation to each other. About this, Husserl (1925/1977) stated, "Here are two actualities related to each other for the one reflecting, and both given in the unity of one acceptance: the objective worldly actuality and the actuality of the experiencing as 'having or acquiring that which is objective in its subjective field'" (p. 96).

What is visual-qualitative appearing? I have been referring to the stream of visual perceptual consciousness, which flows during either straightforward seeing or reflective seeing, as partially constituted, all along its course, by a stream of visual-qualitative appearing. Consistently with this, I emphasized earlier (a) that no instance of visual perceptual consciousness is amodal though (b) amodal visual perceptual consciousness does occur of particular environmental objects, properties, events, and so on. As I explained, whenever amodal perceptual consciousness occurs, it is a constituent of a modal perceptual consciousness. That is, part of the environment always is visual-qualitatively appearing to P even while P has amodal visual perceptual consciousness of a subpart of it. But what is it for something to visual-qualitatively appear to P?

As a result of how a part of the environment reflects light falling on it, that part of the environment gives spatiotemporal structure to the stimulus energy flux at P's photoreceptors and, consequently, determines the flow of visual-qualitative appearing, which is an intrinsic dimension of P's stream of visual perceptual consciousness. If the visual activity involved in the particular case is the activity of reflective seeing, then P has (reflective) visual perceptual consciousness of how the determining part of the environment is visually appearing to him or her. Husserl (e. g., 1913/1983) sought to explain what visual-qualitative appearing amounts to, its components and underlying process, in terms of visual sensory data and their "animation" by an interpretative ("construing") function (cf. earlier quotation, concerning hyletic data

while driving a car, from McKenna [1989, p. 192]). Husserl succeeded better in describing the visual-qualitative appearing of a cube in such a way that the reader can remember or imagine having visual perceptual consciousness of the cube while locomoting around it and reflectively seeing it. In the following passage, Husserl (1925/1977) wrote of a cube's rotating in oriented space, by which Husserl meant P's having visual perceptual consciousness of a stationary cube as P moves around it while looking at it.

This subjective rotating as a phenomenon of orientation contains much continual change of the aspects of the cube's surface. These are perspectival changes. And if we heed the coloring, it has its own color perspectives which change correspondingly, in functional dependence upon them. The surface as perceived straight on is given for instance in the objective coloring, which I describe as uniformly red. But if I heed the changing givenness of the coloring, parallel with the change of orientation, then I have, as with the shape ever new adumbrations of shape, so here ever new adumbrations of color The square [shape of a side] is seen with four equal right angles. But if I pay attention to the perspectives of the square in the subjective rotation, then I see in them the equal angles presented by unequal angles; this deviation from the equal is itself inflected in the multiplicity of perspectives Of course, the same holds, *mutatis mutandis* for the entire cube, and thus for every thing, every complex of things whose content is perceived in space, within the scope of the purely perceptual. (pp. 121–122)

Intentionality of X's appearing goes on. Husserl (e.g., 1925/1977) gave much attention to the running off, during P's seeing of X, of a multiplicity of different appearings of X. More accurately, the visual-qualitative appearing to P of a part of the ecological environment is typically undergoing constant transformation and change. This continuously varying visual-qualitative streaming, goes along with P's being engaged, using his or her visual system, in perceptual exploration of the ecological environment; but such appearential streaming also can be understood as due to the eyes and body never staying quite still. Suppose that this normal exploration, or unavoidable scanning, of the environment is proceeding with regard to X, a particular environmental object that P is reflectively seeing. With reference to such a case, Husserl (1925/1977) brought out the following important point. Here, Husserl was himself the perceiver, and he was referring to the modes of givenness, that is, to the changing and transforming appearing of X.

I find the unity of what pertains to [X] not as something to be detached for itself, *alongside* such modes, nor as a real portion to be separated off *within* them, but once more as the unity of appearances which becomes an object of consciousness in a distinctive synthesis, amid the variation of these modes. (p. 117)

The point is that, subjectively, X continues to be that which is visual-qualitatively appearing to P despite the continuous change in how X is visual-qualitatively appearing. It is X, often an X that itself stays constant in every

way, that remains the intentional object of the stream of changing and transforming visual-qualitative appearing. X does not get separated off subjectively from the appearing; that is, X and its visual-qualitative appearing do not, from the subject's perspective, become two unrelated intentional objects that happen to coexist and get taken notice of together.

Visual-qualitative appearing as intentional object. Indeed, P can be conscious of the visual-qualitative appearing (of X) itself too, that is, without the mediation of anything else that P takes notice of in place of the appearing itself, such as an appearing of the appearing, or a concept of or thought about the appearing. As Husserl (1900/1970) stated: "The appearing of the things does not itself appear to us, we live through it" (p. 538). And we can live through it in such a way (i.e., reflective seeing) that we have, as a dimension of our (reflective) visual perceptual consciousness, inner (second-order) consciousness of the appearing itself. Needless to add, there is no implication here of a phenomenal X, distinct from X itself though a counterpart of it, that is taken notice of in reflective seeing. I agree with Husserl (1913/1983) where he wrote as follows against phenomenal objects: "A second immanent tree, or even an 'internal image' of the actual tree standing out there before me, is in no way given, and to suppose that hypothetically leads to an absurdity" (p. 219). A second, immanent tree is in no way given during straightforward seeing or reflective seeing. Direct, unmediated consciousness is accomplished in the case of reflective seeing because the visual-qualitative appearing of X and P's being conscious of this appearing are a single unified process. They form, Husserl (1913/1983) stated,

essentially an unmediated unity, that of a single concrete cogitatio. Here the [consciousness] includes its Object in itself in such a manner that [the consciousness] only can be separated abstractively, only as an *essentially non-selfsufficient moment*, from its Object. (pp. 79-80)

The latter point is that, whereas X's appearing can occur without any consciousness of it, the inner (second-order) consciousness of X's appearing depends for its own existence on X's appearing, which is itself a literal part of the inner (second-order) consciousness of it, a unity with it, a single concrete cogitatio.

The above point regarding an unmediated unity, Husserl (1900/1970) stated, as follows, about all cases of inner (second-order) consciousness: "Inner perception is . . . the only case of perception where the object truly corresponds to the act of perception, is, in fact, immanent in it" (p. 853). This is an essentially different view of inner (second-order) consciousness than the views of Armstrong, Daubert, Dunlap, Grossmann, Hebb, Humphrey, James, Rachlin, Rosenthal, and Skinner. These are theorists mentioned in the present article (with appropriate references) who gave explicit

attention to inner (second-order) consciousness. A useful future article on reflective seeing might consist of objections that these authors would likely bring against the conception of reflective seeing which I have presented in the present article, together with my rejoinders in defense of it (cf. Natsoulas, 1989).

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