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The Presence of Environmental Objects to Perceptual Consciousness: Consideration of the Problem with Special Reference to Husserl's Phenomenological Account

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In the succession of states of consciousness that constitute James's stream of consciousness, there occur, among others, states of consciousness that are themselves, or that include, perceptual mental acts. It is assumed some of the latter states of consciousness are purely perceptual, lacking both imaginal and signitive contents. According to Husserl, purely perceptual acts present to consciousness, uniquely, their environmental objects in themselves, in person. They do not present, as imaginal mental acts do, an image or other representation of their object. Husserl's theory resembles Gibson's with respect to perception's being direct. Both theorists hold perceptual awareness of the environment is not a "founded" act; its proximate causation does not involve any other mental act. Both theorists contend that perceptual acts keep the perceiver directly in touch with the surrounding environment. The present article considers Husserl's account of this directness. Although this account has problems, and is largely phenomenological description, it may help psychologists to find their way to an adequate account of the objects of perceptual consciousness - perhaps if it is integrated with Gibson's perception theory, as I will attempt in a sequel to which this article is introductory. Husserl seeks to provide the phenomenological side of the story, Gibson the stimulus-informational side.

Orienting the present discussion is a contrast between two kinds of states of consciousness, that is, two different kinds of basic durational components of James's (1890/1950) familiar stream of consciousness. The two kinds of states are specified below; see (a) and (b) in the subsection *Two Kinds of States of Consciousness*. The contrast pertains to the contents of mental states, and not to their objects, not to that which the two kinds of states of

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consciousness have reference to. Whereas an article published recently in *The Journal of Mind and Behavior* discusses at some length the distinction between the objects and contents of consciousness (Natsoulas, 1994a), I explicate this distinction here only insofar as I need to in order to address my topic.

The two states of consciousness of present interest are both of them about the same entity, event, or state of affairs, but they are about it in different ways and through having different contents. Which is to say that, in an occurrent sense, someone is now differently aware of the same object depending on which of these two states is now occurring in his or her stream of consciousness (cf. Føllesdal, 1974). Even when the object of both states of consciousness is the identical state of affairs in the environment — for example, a certain environmental surface's having a certain shape, texture, and color (Gibson, 1979/1986) — the two states of consciousness give a different awareness of this state of affairs, as will be seen.¹

The present discussion embarks from James's conception of consciousness as he spells this conception out in *The Principles of Psychology* (1890/1950, especially Chapter 9) and as I interpret it in a series of articles on the stream of consciousness (Natsoulas, 1992–1993a, 1992–1993b, 1993–1994). In the present article, I move beyond describing and evaluating James's conception of consciousness to consider how, according to Husserl (1900/1970), two kinds of mental acts differ in how they give awareness of the same object. The discussion then proceeds to its main topic, which is Husserl's attempted explanation for how perceptual mental acts succeed in presenting to consciousness their external, environmental object itself.

Husserl was influenced by James (Myers, 1986, p. 490). At one point, Husserl (1900/1970) refers to James's "genius for observation in the field of the descriptive psychology of presentational experience" (p. 420; contrast Hebb [1974]). A great deal of Husserl's psychological thought is concerned precisely with the stream of consciousness, of which a large part consists of "presentational experience." We have "presentational experience" when we are perceiving, but also when we are imagining or remembering. All three of these involve "intuitive" mental acts, according to Husserl's understanding, and so they "present" that of which they give awareness. They differ in this regard from purely "signitive" mental acts, as will be explained.

¹Gibson (1979/1986, pp. 255–256) distinguishes between perceptual and "nonperceptual awareness" of the same environmental state of affairs. However, his distinction is not the one that I shall discuss in the present article. The states of consciousness to which Gibson refers with nonperceptual awareness need not differ in content or object from perceptual awarenesses. Rather, they differ with respect to whether the perceptual system (of which they are an occurrent part and product) "operates [with or] without the constraints of the stimulus flux" (p. 256) when the perceptual system produces them.

The present topic, which pertains to Husserl's distinction between "intuitive" and "signitive" mental acts, is compatible with a Jamesian framework. For, as will be seen, Husserl's mental acts are actual constituents of James's states of consciousness; they are literal parts of them. In some instances, however rare these may be according to James (1890/1950, p. 241), a state of consciousness may consist of just a single mental act. For example, a state of consciousness may be a visual perceptual experience of a certain property of the environment while one has at the same time, in having that state of consciousness, awareness of nothing else at all.

Direct Perception

Husserl and Gibson

I am especially concerned with what occurs in the stream of consciousness when the kind of mental act involved is a perceptual experience of its object. Husserl's understanding of what takes place in such cases has special appeal to me because Husserl holds that perceptual mental acts apprehend their external objects in propria persona, that is, not by giving awareness of something else in their place, something that is internal to the stream of consciousness. Husserl's conception of perception differs fundamentally from those traditional theories of perception that Gibson (1979/1986, pp. 251–253) identifies and strongly criticizes because they assume that the mental processing of sensory inputs is involved in perceiving. According to Husserl, there are no mental way-stations between a perceptual mental act and its object in the environment. Needless to say, this is not to downplay the complex and, in important part, unknown causal relation between a perceptual mental act and its object. There is always a causal distance between a perceptual mental act and what is thereby perceived. Rather, what is being denied is the involvement of a mental kind of mediation in the proximal process that results in a perceptual mental act. The latter is Gibson's (1963, 1966, 1979/1986; Reed and Jones, 1982) view too, though there exist large differences between Gibson's ecological approach and Husserl's phenomenological approach to perception. Here is a brief statement from Husserl's (1900/1970) phenomenological description of the directness of what takes place. I then reproduce a similar, "ecological" statement from Gibson.

In the sense of the narrower, "sensous" perception, an object is directly apprehended or is itself present, if it is set up in an act of perception in a straightforward (schlichter) manner. What this means is this: that the object is also an immediately given object in the sense that, as this object perceived with this definite objective content, it is not constituted in relational, connective, or otherwise articulated acts, acts founded on other acts which bring other objects to perception. Sensuous objects are present in perception at a

single act-level: they do not need to be constituted in many-rayed fashion in acts of higher level, whose objects are set up for them by way of other objects, already constituted in other acts. (p. 787)

My interest in the problem of how things that exist externally to the stream of consciousness are objects of consciousness in themselves, instead of some sort of presentation or representation of them being the object, arises from study of and sympathy for Gibson's (1966, 1979/1986; Reed and Jones, 1982) theory of "direct" perceiving. According to Gibson, we have perceptual awareness of parts and properties of the ecological environment — not of something else which does not belong to the surrounding world, for example, something that takes place internally to the particular perceptual system at work (cf. Lombardo, 1987).

At the beginning of an important chapter of his final book, Gibson (1979/1986) expresses as follows how his theory of visual perception differs from other theories.

Direct perception is what one gets from seeing Niagara Falls, say, as distinguished from seeing a picture of it. The latter kind of perception is *mediated*. So when I assert that perception of the environment is direct, I mean that it is not mediated by *retinal* pictures, *neural* pictures, or *mental* pictures. *Direct perception* is the activity of getting information from the ambient array of light. (p. 147)

In the chapters following this statement, Gibson describes a number of experiments, mainly performed by himself and his colleagues (e.g., Gibson and Gibson, 1957; Gibson, Kaplan, Reynolds, and Wheeler, 1969; Gibson, Purdy, and Lawrence, 1955), supporting his contention that the structured light at the perceiver's moving point of observation contains informational invariants and variants that are sufficient for the perceiver's visual system to give him or her awareness of the corresponding ("specified") properties of the environment.²

From Stimulus Information to Perceptual Awareness

However, Gibson does not address how stimulus information, once it is picked up, isolated, and extracted by a perceptual system, gets embodied in the form of visual awareness of the environment itself (Natsoulas, 1984,

²Regrettably, the above statement from Gibson can be understood to say that the perception of pictures, in contrast to the perception of the environment, is a kind of perception that involves awareness of an inner picture of some kind. According to Gibson (1979/1986, pp. 280—283), we have a dual awareness when looking at pictures, an awareness of both the scene depicted and the surface of the picture itself. However, he does not hold that either of these perceptual awarenesses is based on awareness of something else and is indirect in that sense.

1993; Reed, 1983, pp. 91–92, 1987, 1989). It is, in large part, as though perceptual awareness itself is no more than a given for Gibson's theoretical system. Different cases of it need to be explained, of course, but the nature of perceptual awareness does not require dwelling upon for Gibson's purposes. However, it is natural to ask how a perceptual system goes from registering stimulus information to apprehending that which this information "specifies"? These are clearly not the same. Not only are registering and apprehending different kinds of occurrence, but that which is registered is stimulus information, or variant and invariant features of the stimulus energy flux, whereas it is properties of the environment that are perceptually apprehended. Specification is Gibson's name for the nomic relation between stimulus information and the corresponding properties of the environment or the perceiver that are perceived (Reed, 1983; Natsoulas, 1984).

The general problem is, of course, a major one for any theory of perception, namely, how (what Givner [1992] calls) the physical basis of perceiving, or (what Gibson [1979/1986] calls) the process of perceiving, is related to perceptual experience itself. How are they related but, also, how does perceptual awareness or experience occur? What is it in itself?

Presumably, that particular phase of the perceptual process wherein occurs the perceptual system's extraction of the informational variants and invariants that it has picked up corresponds most closely to the "awarenessof" of which Gibson (1979/1986, p. 239) speaks as being an essential part of perceiving. Gibson states that perceiving is "a keeping-in-touch with the world, an experiencing of things rather than a having of experiences. It involves awareness-of instead of just awareness." And this keeping-in-touch is somehow achieved as a result of the perceptual process of pickup, isolation, and extraction of the stimulus information instantiated by the pattern of light projected to the photoreceptors, or any type of spatiotemporally structured stimulus energy flux at sense receptors. As I have argued (Natsoulas, 1993), perceptual experience is supposed to be, in Gibson, a product and part of the process of perceiving itself. Thus, perceptual experience is not some sort of distinct, subjective output of the perceptual process, something that the latter produces in a separate mental realm; nor is perceptual experience something purely objective, which takes place at the "interface" between the environment and the perceiver or his or her perceptual system (cf. Lombardo, 1987).

It is not that, in contrast, Husserl does successfully explain the mysterious means (cf. James, 1890/1950, p. 216) by which we come to have firsthand experience of things in the environment. Neither Gibson nor Husserl adequately explain what Russell among others held to be an impossible achievement. Speaking of the causal chain that begins with the sun's radiating light in our direction and ends with our perceptual experience of the sun, Russell

(1927) stated, "We cannot suppose that, at the end of the process, the last effect suddenly jumps back to the starting-point, like a stretched rope when it snaps" (p. 440; cf. Köhler, 1966, p. 75).

But Husserl, in contrast to Gibson, has much to say regarding the special part of what he thinks takes place in such cases that lies in the stream of consciousness. Therefore, psychologists — who will be trying to figure out what happens between, on the one hand, the perceptual system's resonance to stimulus-informational variables and, on the other hand, the perceiver's experiential awareness of that which those variables specify in the world beyond the stream — may find it useful to examine theoretical approaches to the problem that come from each side: such as, Gibson's approach from the environmental (plus stimulus-informational) outside, and Husserl's approach from the phenomenological inside. Psychologists may want to try solving this problem by seeking to get, so to speak, the best internal approach and the best external approach to meet where they only converge, or by seeking to bridge the causal gap between their respective referents. In a sequel to the present article, I shall explore this possibility with reference to Husserl, Gibson, and the presence to perceptual consciousness of environmental objects themselves. The present article may be viewed as introductory to that sequel.

A Jamesian Framework

The Stream of Consciousness

The two states of consciousness in question, namely (a) and (b) below in the next subsection, are two kinds of basic durational components of James's famous stream of consciousness. Such components individually comprise all that mentally occurs to a human being at any one time. In *The Principles*, James rejected the existence of nonconscious or unconscious mental occurrences, but he did allow for a second stream of consciousness in unusual cases (pp. 165 and 399).

In the present article, I am assuming just a single stream per person. However, all that I shall have occasion to say here about that one stream would also apply to the second stream in the one person if this existed (cf. Puccetti, 1973, 1981, 1989). If it did exist, there would occur simultaneously in a single individual two integral experiences, rather than the normal single unitary total experience of which, according to James, a stream of consciousness always consists at any point where there is no "time-gap" in the stream. James's concept of a "time-gap" in consciousness refers to when the stream of consciousness ceases flowing for a brief or longer time (James, 1890/1950, pp. 200, 213, and 237). For such durations, the individual functions purely physiologically, unless a second stream is flowing.

Interchangeably, James (1890/1950, pp. 185–186) called each basic durational component of the stream of consciousness a "thought," a "feeling," or a "state of consciousness." By a basic durational component of the stream, I do not mean, of course, just any unbounded temporal stretch of the stream or just any size temporal section of it. I have in mind those minimal psychological units of which, one after another, James's stream of consciousness is theoretically supposed to consist (Natsoulas, 1992–1993a). Thus, as one lives one's mental life, one state of consciousness replaces the previous state of consciousness. One basic durational component ends its very brief existence precisely as the next one comes into existence.

Of course, this proposed temporal adjacency assumes the absence of a time-gap between successive components. Time-gaps do occur from time to time according to James, though he could not say how often they occur. James contemplated the possibility that the stream of consciousness might be "incessantly interrupted and recommencing," which could mean that successive states of consciousness are not only discrete but, also, always separated in time. However, whether this is so is a matter for "future science" to determine, according to James (1890/1950, p. 200), since we cannot tell firsthand that a time-gap has occurred. That is, consciousness cannot detect its own absence. From the first-person perspective, one never has immediate awareness of a time-gap in consciousness. Those time-gaps that we know about, even in our own case, we know about by inference.

The basic durational components of the stream of consciousness are integral pulses of mentality. They are equivalent to one's total experience that is taking place at any particular moment. I assume that this moment does not correspond to a time-gap in the stream of consciousness. However complex one's experience at any particular moment may be, it is a single, unified state of consciousness.

We commonly think of our individual experiences as greater in duration than a single pulse of consciousness is. Indeed, we often think of an experience in such a way that it constitutes "a specious present" (James, 1890/1950, Chapter 15; Natsoulas, 1992–1993b), or even as lasting longer than the twelve seconds or so that is supposed to be the duration of this "practically cognized present" according to James (1890/1950, p. 613). Nevertheless, an experience consists of a pulse of consciousness, or a succession of such pulses. That is, an experience is a mental process whose development is not continuous over a temporal interval that takes more than one pulse of mentality to fill.

At least, the latter is what I have argued in a previous article regarding James's implicit conception of the stream at the time of *The Principles* (Natsoulas, 1992–1993a, 1992–1993b). I have argued that James's implicit view at the time differed from the explicit one (of the stream's temporal

smoothness or continuity) for which James is well-known. And, as I elsewhere spelled out, later on in James's (1909/1987, 1910/1987) writings, discreteness rather than continuity clearly was, as well, his explicit view of the temporal structure of the stream of consciousness (Natsoulas, 1993–1994).

Two Kinds of States of Consciousness

The two kinds of states of consciousness of present interest are these:

- (a) a state of consciousness in which one *conceives* of a certain entity, event, or state of affairs (X) but *does not*, as well, *perceive* X, at least not as a part of having that one state of consciousness occur in one's stream; and
- (b) a state of consciousness in which one perceives the identical X but does not, as well, conceive of X, as least not as a part of having that one state of consciousness occur in one's stream.

The difference between these two states of consciousness is related, though not equivalent, to James's (1890/1950, pp. 221–223) well-known distinction between knowledge-about and knowledge of acquaintance — which he introduces in the pages right before he begins his celebrated "Chapter IX. The Stream of Thought."

Also, if these two states of consciousness include no other mental acts (which would very likely complicate matters), they qualify, respectively, as "a signitive mental act (or intention)" and as "an intuitive mental act (or intention)." These are Husserl's (1900/1970) terms. And, they indicate the main distinction that I want to pursue by way of treating of the main topic of the present article. But before I pursue Husserl's distinction, some further preliminary comments will be useful.

Further Preliminary Comments

Mental Acts

It was states of consciousness, the basic durational components of the stream of consciousness, that Husserl described as being comprised of mental acts. For example, here is how, at one point, Husserl described a single state of consciousness involving several mental acts.

An intentional object need not . . . always be noticed or attended to. Several [mental] acts may be present and interwoven with one another, but attention is emphatically active in one of them. We experience them all together, but we "go all out" (as it were) in this particular one. (Husserl, 1900/1970, p. 562)

Thus, a state of consciousness will have objects of which perforce there is awareness therein, but these objects need not be "noticed" as well. The latter

is a matter of a mental act's involving attention in its occurrence. This involved attention in a mental act is not itself an additional mental act, but a matter of how a mental act is "carried out," or the "energy, so to speak, with which acts assert themselves in an act-complex" (Husserl, 1900/1970, p. 582).

All mental acts either (a) have objects, that is, something that they are about, or (b) they are as though they have objects. The latter covers those cases where the apparent object of a mental act does not exist (e.g., a centaur; cf. Husserl, 1900/1970, p. 596; Miller, 1984).³

Intentionality and Aboutness

As before, I find it useful to distinguish between intentionality and aboutness (Natsoulas, 1988). Whereas all mental acts instantiate the property of intentionality, they do not all succeed in being about something. Intentionality is intrinsic to a mental act. It is a property that any mental act possesses no matter what else happens. In contrast, the aboutness of a mental act is a relation between the mental act and its object. Such a relation does not exist unless both terms of the relation exist.

For example, no relation exists between you, or your states of consciousness, and the fire-breathing dragon that you are thereby hallucinating. For example, you may experientially take such a dragon to be standing twenty feet away from you or to be threatening you, but it does neither. This is not to say, of course, that you may not be more frightened by having this hallucinatory experience than by anything you have ever perceived or known to be the case. It is to say that psychologists need not be taken in by their patients' hallucinations, that is, to the point of granting a kind of existence to what does not in fact exist. Psychologists need not introduce intentional objects throughout their accounts of the stream of consciousness: that is, even in those cases where that which is being experienced is not real (cf. Føllesdal, 1974, on hallucinations).

Nonintentional States of Consciousness

Are there nonintentional states of consciousness? For Husserl, not all "experiences" are mental acts. That is, not all the constituents of a state of con-

³Husserl was, of course, the founder of phenomenology. Therefore, he is often described as holding that all mental acts have objects; since, indeed, they all instantiate the intrinsic property of intentionality. There is attributed to his theory of the mental a distinction between phenomenal objects and transcendent objects, which exist beyond the stream of consciousness. However, Husserl rejects phenomenal objects; so that, for example, a mental act that is as though it has a centaur as its entire object simply has no object (Natsoulas, 1994b). As Føllesdal (1974) stated, Husserl proposed "an analysis of consciousness where it is not crucial that there be an object toward which an act is directed" (p. 378; cf. Føllesdal, 1982).

sciousness in James's sense qualify as mental acts. In Husserl's view, sensations and complexes of sensations, for example, are also "experiences" and constituents of states of consciousness. But sensations and complexes of sensations are not mental acts, for they themselves do not possess the property of intentionality, except in the sense of their being literal ingredients of mental acts, which always possess this property.

However, it is not clear in Husserl (1900/1970) whether sensations and complexes of sensations ever make up the entirety of a state of consciousness, thus whether states of consciousness are ever completely lacking in intentionality, whether they are ever in this sense "nonintentional." In this among other ways, Husserl's understanding of the stream of consciousness may differ from James's (consult especially James [1890/1950, pp. 224 and 606]). James holds that all states of consciousness, however primitive any of them may be, possess the property of intentionality.

Searle's nonintentional conscious states. It is not unusual for a theorist to propose that there are states of consciousness that lack intentionality. A recent example of such an author is Searle (1992), who seems to be suggesting that the state of having a pain is not intentional (p. 84). However, he does speak of one's being in this conscious state as one's being "conscious of a pain," which would seem to imply some sort of intentionality belonging to the state of having a pain. At this point, he also refers the reader to the following endnote.

There is one qualifaction to this point. The sense of body location does have intentionality, because it refers to a portion of the body. This aspect of pains is intentional, because it has conditions of satisfaction. In the case of a phantom limb, for example, one can be mistaken, and the possibility of a mistake is at least a good clue that the phenomenon is intentional. (p. 251)

Searle means that, in the case of phantom limb, one feels pain as taking place in a limb that is missing. In other cases, one feels pain as taking place in a part of one's body that exists. Therefore, it seems to me, the states of consciousness that comprise having a pain are all intentional, since one is always aware of pain as an occurrent property of a part of the body.

Are there any cases in which pain is involved in a state of consciousness that is not intentional? Are there undirected instances of pain, in which one feels pain without locating it, however wrongly? I don't believe there are. Perhaps all that Searle means to suggest is that the pain-qualitative content of a state of consciousness is itself not intentional. Compare the next subsection, on Husserl's view of sensations and complexes of sensations as nonintentional experiences. However, such contents may not ever occur on their own, independently of intentional context. Searle's (1992, p. 130) other examples of nonintentional conscious states are moods, such as depression or elation about nothing in particular. In a previous volume, Searle (1983, p. 1) cited "nervousness, elation, and undirected anxiety" as examples.

However, I would think that a mood is something that colors or flavors one's states of consciousness, rather than occurring on its own and being itself such a state or even a sequence of conscious states. Elation, for example, infects all one's states of consciousness for as long as elation lasts. While one is elated or in a different mood, there is a certain kind of feeling or affect involved as part of the content of the states of consciousness that are taking place. As for undirected anxiety: in such cases, I suggest, there is something very vague that one fears the occurrence of, something that is unspecified in the emotional state beyond its being "something terrible" that might occur next or soon.

However, I am not suggesting that such emotions themselves possess an unconscious (repressed) object. From Freud's cogent perspective, the latter is actually the object of the unconscious emotional impulse that produces the undirected conscious emotion. These are two distinct, intentional mental occurrences, each having its own content and object. Presumably, the object of the emotional impulse (or "need") is specific. In contrast, the undirected emotion itself (which occurs in Freud's perception—consciousness system) has a very vague object. What its object is, which entity or event its object is, depends on the emotion's own content, rather than on the content of its proximal cause, however reliable this cause may be, which takes place in a different system of the mental apparatus. Note, also, that actual emotions, which necessarily involve affect or feeling, are states of consciousness. They never occur nonconsciously, though they sometimes have very vague objects.

Purported states of pure consciousness. Much less often than Searle's kind of view, an author will propose that there are states of consciousness in which there is awareness without there being awareness of anything, real or imagined, actual or fictional. Sometimes, such states are called states of "pure consciousness." They are supposed, nevertheless, to possess intentionality. As it were, they point or aim, but not even as though at something that in fact does not exist. They do not have apparent objects any more than they have real objects.

The idea of such undirected intentionality may be a self-contradictory idea. What is intentionality? As Føllesdal (1974) states on behalf of Husserl, "intentionality is the peculiarity of consciousness to be directed, to be as if it is consciousness of something" (pp. 377–378). Intentionality is a property of mental states that makes it possible for them to be about something. Mental states are either about something or, at least, they are as though about something, in those cases where their apparent object does not exist.

Betty (1984–1985) argues, in contrast, that "human beings can be *conscious* without being conscious of anything" (p. 212). Betty proposes that states of pure consciousness are characteristic of the stream of consciousness during mystical experiences, although not exclusively. In fact, he claims that

our stream of consciousness normally moves back and forth, many times a minute, between states of consciousness that are (or would be) about something and those that are no less states of consciousness though they are not of anything at all, whether real or imagined. A difference from the mystic is that we do not "sustain" the latter kinds of states of consciousness, as he or she does. In us, they are replaced quickly, within a fraction of a second, with the kind of state of consciousness that does have an object or is as though it has an object.

However, when one examines Betty's examples of these states, as mystics have described them, one finds that they typically have something rather metaphysical and all-encompassing as their objects. A vague or general object of consciousness should not be understood as amounting to no object at all. Consider this comparison: no theorist would suggest that ordinary, common presentiments — to the effect, for example, that someone or something (further unspecified) is present in the room with oneself — consist of nonintentional states of pure consciousness.

Also, the religious or philosophical value of mystical experiences partly derives from the component states of consciousness's giving awareness of something beyond themselves that renders the awareness enlightening or somehow elevating. Later, a mystical experience may be interpreted in terms of certain religious or metaphysical beliefs. If the mystic was not aware of anything during the mystical experience, if nothing at all was "revealed" to him or her at the time, there would be nothing to interpret. Even an awareness of absence, that is, of something's not being where it was expected to be, is an awareness of a fact or nonfact about the world.

Husserl and nonintentional states. The following is a comment of Husserl's (1900/1970) that would seem to come as close as Husserl comes to accepting states of consciousness that do not involve mental acts and therefore do not possess intentionality.

Sensations of pleasure and pain may continue, though the act characters built upon them lapse. When the facts which provoke pleasure sink into the background, are no longer apperceived as emotionally coloured, and perhaps cease to be intentional objects at all, the pleasurable excitement may linger on for a while: it may itself be agreeable. Instead of representing a pleasant property of the object, it is referred merely to the feeling-subject, or is itself presented and pleases. (pp. 574–575)

In the latter case, the "excitement" is itself the object of pleasurable awareness. And so, the state of consciousness to which this pleasure belongs does not lack intentionality. This case would seem to be consistent with Husserl's (1900/1970) statement of a few pages earlier in his book: "The specific essence of pleasure demands a relation to something pleasing" (p. 571). In the present case, it is the "excitement" that one is aware of and that pleases,

when it lingers; the object of awareness is intrinsic to the states of consciousness, rather than being something that lies beyond the stream.

Husserl's uncertainty regarding the existence of nonintentional states of consciousness is made explicit as follows in a subsequent volume.

Whether everywhere and necessarily such sensuous mental processes in the stream of mental processes bear some "animating construing" or other (with all the characteristics which this, in turn, demands and makes possible), whether, as we also say, they always have *intentive functions*, is not to be decided here. (Husserl, 1913/1983, p. 204)

Mental Acts, Not Actions

As Husserl quickly makes clear, his use of the word act is not intended for the purpose of characterizing a state of consciousness, or part of it, as an activity, or as being something that its owner does. "In talking of 'acts'..., we must steer clear of the word's original meaning: all thought of activity must be rigidly excluded" (Husserl, 1900/1970, p. 563). Mental acts are not actions performed.

At the same time, Husserl acknowledges that attention may be more or less active in a particular mental act, and he even speaks of "the energy with which certain acts are performed" (p. 582). But he does not mean that, in "performing" a mental act, one produces it. Rather, it may be a mental act into which one gets "absorbed," that is, a mental act that involves the energy or emphasis of attention. "Acts must be present, before we can *live* in them or be absorbed in performing them, and when we are so absorbed . . . we mind the objects of these acts" (Husserl, 1900/1970, p. 585). Again, to "mind" the objects of our mental acts is not to act in a certain way; it is to be more fully involved in the occurrence of one's mental acts. There is a crucial distinction between your acting, or your performing an action, and your having a mental act occur to you, as part of the flow of your stream of consciousness.

Temporal Discreteness or Continuity

As already mentioned, in recent articles, I have argued that implicitly at the time of *The Principles*, and explicitly later on, James understood the stream of consciousness to consist of a succession of pulses of mentality, thus to have a temporally discrete rather than continuous structure (Natsoulas, 1992–1993a, 1992–1993b, 1993–1994). However, there is no need to introduce into the present discussion, which considers a part of Husserl's theory of the stream, the question of whether two successive mental acts are actually unitary with respect to each other, rather than distinct from each other. For present purposes, I shall ignore the issue of the continuity versus discreteness of the stream, that is, whether the stream consists of a single continuous process or consists of pulses of consciousness. Husserl's mental acts, like James's

basic durational components of the stream of consciousness, lend themselves quite readily to discussion as integral wholes, albeit as parts of larger wholes (i.e., James's states of consciousness). It would be more difficult, I believe, to discuss Husserl's mental acts without making that assumption. However, see Miller's (1984) insistence, from a Husserlian perspective, that the stream of consciousness is indeed a stream, as opposed to its having an atomic structure as Grünbaum (1967) argues.

"Mere Pointing" versus "Making Present"

Two Kinds of Mental Acts

How do intuitive mental acts (intentions) differ from signitive mental acts (intentions)? In the following quoted passage, Husserl (1900/1970, pp. 728–729) distinguishes between them in terms of the property of "fulness" [sic].

Only intuitive mental acts possess this property to any degree. Signitive mental acts are "empty" in this respect. When the stream of consciousness progresses, on the spot, from a signitive mental act to an intuitive mental act having the same external object as the signitive mental act, this movement of the stream goes from an act entirely lacking in "fulness" to one that does possess this property. That is, the change is not, in such cases, simply an increment in the "fulness" already characterizing the stream at this point. The change is an addition of something different to the stream and is owing to the subsequent mental act's being intuitive, having intuitive content. Husserl therefore calls the intuitive mental act in such a sequence "the fulfiller" and "the giver of fulness."

Accordingly, though a signitive mental act itself partakes not at all of the property of "fulness," it has an object or is as though it has an object. Intentionality does not depend on "fulness." However:

A signitive intention merely points to its object, an intuitive intention gives [its object] "presence," in the pregnant sense of the word, [that is] it imports something of the fulness of the object itself. However far an imaginative presentation may lag behind its object, [the imaginative presentation] has many features in common with [its object], more than that, it is like this object, depicts it, makes it really present to us. A signitive presentation, however, does not present analogically, it is "in reality" no "presentation," in [a signitive presentation] nothing of the object comes to life The "clearer" a presentation is, the higher its pictorial level, the richer it is in fulness. The ideal of fulness would, accordingly, be reached in a presentation which would embrace its object, entire and whole, in its phenomenological content. (Husserl, 1900/1970, pp. 728–729)

Next, I provide several comments on this representative passage from Husserl.

Equal Transcendence

A purely signitive mental act should not be understood as (a) a mental act whose objects are held to inhabit a separate world from the objects of purely intuitive mental acts, nor as (b) a mental act that is directed necessarily on an ingredient of the stream of consciousness instead of on external objects. It is a signitive mental act's relation to its object that is different, not necessarily the object itself.

Also, when Husserl states that signitive mental acts merely "point" to their objects, he does not mean that they do not, equally as well as intuitive mental acts do, specify their objects, that is, give awareness specifically of their objects. Indeed, Husserl does state that signitive mental acts do not "reach" their objects; that they merely "think" them (Levinas, 1963/1973, p. 67). But this does not make the objects of signitive acts any more unreal, general, or vague than the objects of intuitive mental acts are. A signitive mental act's "pointing" to its object is not just a "pointing" in a general direction, but can be a "pointing" to something in particular, which is therein cognized. As I have mentioned, both an intuitive mental act and a signitive mental act may have the identical object. As Levinas (1963/1973) stated with reference to Husserl's signitive mental acts: "Consciousness transcends itself to the same extent as it does in its 'presence to things'" (p. 68), that is, to the same extent as when an intuitive mental act gives its object presence to consciousness.

Similarity Between Intuitive Mental Act and Its Object

The "fulness" of an intuitive mental act consists of the totality of properties of the mental act that make it possible for the mental act to apprehend its object in that special way in which intuitive mental acts are different from signitive mental acts. Namely, intuitive mental acts make their objects "really present to us." Husserl refers to giving presence as "analogical," and to the mental act as involving an "analogical representation." He does so because there is similarity, in his view, between the features of the object and the intrinsic mental features making for the fulness of the respective intuitive mental act. When Husserl writes of an intuitive mental act's possessing its object or making contact with it, it is this similarity of their features that he means, together with how the features occur in the intuitive mental act so that the object itself appears to the perceiver.

I shall say more about the proposed similarity between the features of an environmental object and the features of an intuitive act directed on the object. It is not at all obvious what Husserl has in mind here, since he cannot mean that, for example, demonstrations of the viscosity of a certain substance, such as a mass of toffee that is being repeatedly stretched, are

replicated in the stream of consciousness when they are perceived. The stream of consciousness does not literally contain anything that possesses to any degree the property of viscosity. Nevertheless, let me proceed for a while, expressing Husserl's account, as though the similarity of an external object to the intuitive content of a mental act is not a problematic idea.

Not a "Picture-Theory"

The above passage from Husserl (1900/1970, pp. 728–729) makes reference to an intuitive mental act's "depicting" its object and to the act's "pictorial level." However, this figurative language should not be allowed to mislead us into understanding Husserl's account as being what he calls a "picture-theory" of perceptual and other intuitive mental acts (Husserl, 1913/1983, p. 92). Such a theory, according to Husserl, confuses two kinds of intuitive mental acts, (a) the simple perceptual mental act of an object in the environment and (b) a state of consciousness that is both, at the same time, of a picture and of what this picture depicts. In the latter case, two mental acts are involved, and one mental act is based ("founded") on the other mental act, according to Husserl. That is, apprehension of that which the picture depicts is mediated by apprehension of the picture itself. Husserl explicitly holds that there is nothing like the latter involved in simple perception (or simple memory or simple phantasy).

Husserl's metaphorical references to pictures in characterizing how intuitive mental acts present their objects can be given sense in terms of the similarity that Husserl proposes exists between an intuitive mental act and its object. However, there is something more that Husserl means by perceptual mental acts' depicting their objects. And the latter would seem to be not completely consistent with his view of perception as direct. See the subsection below titled *The Intentional Character of Perceptual Mental Acts*.

Dimensions of "Fulness"

The object of an intuitive mental act is experienced as present or given, due to the mental act's intuitive content. Ideally, an intuitive mental act

⁴Cf. Gibson, 1979/1986, pp. 281–282, on the "duality of picture perception." See also the quotation from Gibson early in this article, which contrasts seeing Niagara Falls and seeing a photograph of Niagara Falls. Gibson calls the latter "mediated perception" despite his theory of picture perception. The theory proposes that a picture provides stimulus information that is specific not only to the picture surface but also to the part of the environment that the picture depicts. This would seem to imply that, in looking at a picture, it is not necessary to have awareness specifically of the picture, or picture surface, in order to have awareness of that which the picture depicts.

would apprehend its object in its entirety, in the sense that all of the object's features would be present to consciousness. Husserl speaks of the degree of this completeness as the "extent or richness" of the mental act's fulness. He also speaks of the "reality-level" of the fulness, meaning the total number of features that are strictly presented, rather than merely imagined. Moreover, there can occur greater or lesser "liveliness" of the mental act's fulness, depending on how similar the relevant features of the mental act are to the corresponding features of its object. However, talk of the ideal richness, reality, and liveliness of a mental act's fulness should not obscure "how little of the object which appears [i.e., which is perceived] is as such to be found in the experience of its appearing" (Husserl, 1900/1970, p. 538).

What is the relation between the features of the object of an intuitive mental act and the intrinsic features of the respective mental act comprising this mental act's fulness? As mentioned, the corresponding features are similar to each other, though to varying degree. The degree of a mental act's fulness refers to both the number of features of the object that are present in having the particular mental act and how similar the particular features of the object are to their counterparts in the mental act that serves to make them present. Thus, having an intuitive mental act of a certain object does not mean that all of the object's features are made present by the act, though of course they all exist in the object itself.

The degree of fulness of a mental act amounts to the degree of the mental act's resemblance to its object, in the case where the mental act does have an object. In those cases in which an intuitive mental act has no object, the mental act possesses the same kind of content as it would possess if the mental act did present an actual object. It possesses an intuitive content. And this content works in the same way, that is, to give "perspectival slantings" on, in this case, what would be the mental act's object, though it is not actually its object because it is merely imagined. In this connection, Husserl (1900/1970, p. 731) refers to "imaginatively slanted contents" and "sensory phantasms and imagery," and contrasts these to the respectively analogous "perceptively slanted contents" and "sensations."

The Example of Objective Color

Consider the color of an object that is perceived. This color is seen by the perceiver as a property of the object. Which it is, except in certain cases of perceptual illusion, when the object is actually of a different color. Just as the object is not itself an experience, so too its objective color and other properties are not experiences (cf. Gibson, 1979/1986). However, there is a real part of the act (i.e., of each mental act in which we perceive the object with its color) that corresponds to the color of the object. That

part is a color-sensation. Color and corresponding color-sensation are not the same feature, although the presence to consciousness of the objective color, its visual appearing, depends on having mental acts that involve the corresponding color-sensation as part of their content. Regarding the fact that color and color-sensation are different properties, which are, however, often confounded with each other by theorists and others, Husserl (1900/1970) stated,

Here it is enough to point to the readily grasped difference between the red of this ball, objectively seen as uniform, and the indubitable, unavoidable projective differences among the subjective colour-sensations in our percept, a difference repeated in all sorts of objective properties and the sense-complexes which correspond to them. (p. 538)

Husserl is pointing out that the color-sensations by which we perceive the redness of the ball will vary depending on perceptual conditions; though the color of the ball itself normally does not change, and we usually perceive the color as persisting despite the change or difference in the sensation (cf. Føllesdal, 1974, p. 382).

Stating his point more generally, Husserl warns against theoretically identifying what we perceive with the appearing (or perceptual presence) of the external object. Whereas (a) the external object of a mental act appears to us when we perceive it, or when the corresponding perceptual mental acts occur, (b) the appearing of the object does not itself appear to us. Rather, we experience its appearing, or live through its appearing. Whereas sensations make it possible for external objects to appear to us, we have no further sensations of a kind that would permit the appearing of an external object to appear to us in its turn.

Pure Perceptual Mental Acts

Strictly Presentative Contents

When, earlier in this article, I first called attention to the distinction between intuitive mental acts and signitive mental acts, I did so as though there were pure cases of each, and I shall continue on that assumption. However, I must mention that a particular perceptual act, which is always a certain kind of intuitive mental act, normally gives awareness both of features of the perceived object that appear and features of the perceived object that do not appear. That is, a single perceptual act is both intuitive and signitive in the vast majority of cases. However, for the present purpose, let us consider only those acts that are purely intuitive and those that are purely signitive (whereby no feature of the object appears).

Husserl distinguishes, as well, those mental acts that are purely perceptual from other mental acts that, like purely perceptual mental acts, are purely intuitive. In the occurrence of a purely perceptual mental act, no feature of the object is imagined; all of the object's features of which one has awareness in having the perceptual act are perceived. The perceived features of the object are the ones that themselves produce corresponding sensations, whereas we have awareness of any features of an object that are merely imagined owing to the inclusion of sensory phantasms or images in a mental act.

Husserl (1900/1970) states that purely perceptual contents are "strictly presentative contents: imaginative contents comprise only analogizing contents" (p. 733). I shall not further address here Husserl's treatment of the distinct kind of intuitive content that is the only kind of content that purely imaginal mental acts are supposed to possess, except merely to call attention, as well, at this point, to Husserl's reference in this connection to "analogical picturing" and "representation" (p. 730).

How Is the Object Itself Presented?

In pure perceptual acts, the object perceived is not only intuitively presented (as it also is in purely imaginal mental acts) but also it is actually presented (as it is not in purely imaginal mental acts). That is, those features of the object that the act gives awareness of, those features that appear, are themselves present to consciousness. Important to emphasize, these features of the object are not contents of consciousness. They are not literal parts of consciousness. For example, a visual perceptual experience of a red ball cannot be itself round, red, and smooth, which its object is. Rather, the experience gives to the external object a presence to consciousness, gives to the perceiver an awareness of the object as something there, something present, with its properties.

According to Husserl, a pure perceptual act accomplishes this feat for one thing because its intuitive content resembles the properties of the object. However, as we have seen, there occurs the same kind of resemblance in the case of intuitive mental acts that are nonperceptual, mental acts of imagination and memory. Do these intuitive mental acts also make their objects present to consciousness in the sense that pure perceptual acts do? After all, such intuitive acts, too, have fulness (when their objects exist) in the sense explained above for perceptual acts.

On this question, Husserl (1900/1970) stated,

The perfection of an imagination, however great, still leaves it different from a perception: it does not present the object itself, not even in part, it offers only its image, which, as long as it is an image at all, never is the thing itself. The latter we owe to perception. (p. 761)

One might put it that an imaginal mental act, being intuitive, does present its object, when it has one, but the act does not present its object itself, in person. An imaginal mental act "offers" only its object's image, not the object itself. A perceptual act somehow manages to "offer" not just the complex of sensations that its object produces. It manages to "offer" the external thing itself. But this is not due to the "perfection" or ideal fulness of perception. As we have seen, a pure perceptual mental act may present the perceiver with its object to varying degrees of richness and liveliness of fulness. That is, a purely perceptual act, while including only strictly presentative contents, and therefore having a perfect reality-level, need not present many of the properties of its object, nor present them with great accuracy. It is no less, in such cases, a perceptual act and it gives the object itself. How does any perceptual act present its object itself, whereas a different kind of intuitive mental act, however ideal in its richness and liveliness of fulness, cannot do so, despite its being a presentational kind of experience?

The Intentional Character of Perceptual Mental Acts

Husserl's (1900/1970) answer to the latter question is as follows. "The intentional character of perception, as opposed to the mere representation of imagination, is that of direct presentation. This is, as we know, an internal difference of acts, more precisely, of their interpretive form" (p. 761). Thus, perception's uniquely direct presentation of its object is to be explained other than simply by the similarity of the perceptual mental act's intuitive content to the object itself. In this regard, Levinas (1963/1973, p. 73) speaks of the "specific character and meaning of perceptual intentionality" as the crucial factor, and calls our attention to the following relevant passage in a later book of Husserl's (1913/1983):

The perception of a physical thing does not presentiate something non-present, as though it were a memory or a phantasy; perception makes present, seizes upon an ititself in its presence "in person." Perception does this according to its own peculiar sense; and to attribute something other than that to perception is precisely to contradict its sense. If we are dealing, as here, with the perception of a physical thing then it is inherent in [the perception's] essence to be an adumbrative perception; and, correlatively, it is inherent in the sense of its intentional object, the physical thing as given in it, to be essentially perceivable only by perceptions of that kind, thus by adumbrative perceptions. (pp. 93–94)

It is the perceptual act's "own peculiar sense" that does the job, according to Husserl. It is part of the essence of a perceptual act that it be "adumbrative." Also, as we saw, Husserl makes reference to a perceptual act's essential "interpretive form" as responsible. It is with reference to such statements that one must consider the question of how, according to Husserl, a percep-

tual act manages directly to present to consciousness the environmental object itself.

Note, first, Husserl's (1900/1970) acknowledgement that the object of a perceptual act is never actually given. However, he means this in the sense that not all of the object's aspects and properties are ever given. "The object is not actually given, it is not given wholly and entirely as that which it itself is. It is only given 'from the front,' only 'perspectivally foreshortened and projected' and so on" (p. 712). Husserl understands as follows the ideal case in which a perceived object would be in itself present. If the environmental object of the act was indeed itself present to consciousness, then everything of which the object consists would be present to consciousness, which it never is. To grasp an object itself, as Husserl sees this, is to grasp the object as it is in itself, in every way that the object is in itself. Such grasping is impossible, at least with respect to environmental objects.

Nevertheless, Husserl (1900/1970) states that a perceptual act "grasps the object itself, if only by way of an aspect" (p. 713). If a perceptual act is not purely perceptual, that is, if it has imaginal and signitive contents as well, the perceptual act discriminates, so to speak, between those features of the object that are themselves present and those that the perceptual act merely thinks or imagines. It performs this discrimination by applying a kind of interpretation to the mental act's sensational content. Specifically, the mental act interprets its sensational content's

parts and moments as self-projections or corresponding parts and moments of the perceptual object, and so imparts to its total content the character of a "perceptual picture", a perceptual projection of the object. In the ideal, limiting case of adequate perception [i.e., perfect fulness], this self-presenting sense content coincides with the perceived object. (Husserl, 1900/1970, p. 713)

In the case of actual perceptions, which necessarily possess much less than perfect fulness, those aspects or properties of an environmental object that are perceived (rather than imagined or conceived) are grasped therein with the sense of their being present in themselves, and the object to which they belong is grasped as being present in itself. They are not grasped as in imaginal mental acts, when they are grasped as imaginal, as being merely an image of the particular environmental object imagined. Rather, in perceptual mental acts, they are grasped as perceptual, that is, as being actually there in the environment and themselves directly presenting themselves to consciousness ("self-projection"; Husserl, 1900/1970, p. 762).

Levinas (1963/1973) considers the following possible criticism of Husserl's view:

If the existence of an object given in an intuitive act means only the presence in the mind of some immanent, intuitive contents, then the latter do constitute the genuine, real objects. In that case, consciousness . . . would become once again a sphere of contents representative of objects, whose intentional transcendence would be only an illusion. (p. 71)

Levinas points out, in reply to this criticism, that there is more to an intuitive mental act than the sensational or imaginal data that constitute it. Specifically, an intuitive mental act, like signitive mental acts, possesses the essential characteristic of intentionality. This characteristic of the intuitive mental act gives "an irreducible sense" to its intuitive content, so that the mental act transcends its content and reaches its external object.

In giving sense or meaning to its own intuitive contents (i.e., "construing" or "interpreting" sensations), a mental act does not give awareness of these contents. Rather, the perceptual mental act takes (the latter is my word) its intrinsic "data" of sensation to be the corresponding properties of the external object itself. The perceptual act is such in its taking (i.e., in what Husserl calls its interpretive form) that we have no awareness at the time of any sensations except in this unique way in which they are taken by the perceptual mental act, namely, taken as features of the very external object from whose physical presence they have arisen. In other words, the meaning given by the perceptual mental act is of the external object as itself present to consciousness. To emphasize: the bestowing of this meaning is not a matter of the occurrence of a more basic mental act on which the perceptual mental act is "founded." A perceptual mental act is an act of meaning-bestowal, albeit in a unique way that makes its object present in itself to consciousness.

No doubt, a number of criticisms of Husserl's account of the presence of external objects to perceptual consciousness will come to readers' minds. For example, how can a mere phenomenological meaning serve as a bridge between the mind and the world independent of the mind? We can mean (intend, refer, describe, depict, etc.) the world as it actually is, but this would seem to be far less than the world's presence in itself to our consciousness. We know that no matter how much alike the representation of a thing and the thing itself are, the representation cannot constitute the object's own presence. Of course, the meaning involved in a pure perceptual mental act "animates" complexes of sensations produced by the perceptual object. However, if the external object cannot be present except as meant, then it may be a mistake to speak as Husserl does when he says that the external object itself is apprehended (even in part).

Some of the obvious criticisms of Husserl's account have already been mentioned or hinted at in the present article (e.g., the problem of similarity between object-features and sensations). These objections, as well as the one

just mentioned, will find further expression in a sequel to this article. There, I shall try to bridge the gap between Husserl's phenomenological account of perceptual presence to consciousness and Gibson's ecological conception of direct perception.

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