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# On the Distinction Between the Object and Content of Consciousness

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This article treats of the distinction between objects and contents of pulses of consciousness — those minimal temporal sections of James's stream that give veridical or nonveridical consciousness of, or as though of, something, which can be anything perceivable, feelable, imaginable, thinkable, or internally apprehensible. The objects of pulses of consciousness are whatever the pulses mentally apprehend (or take), whatever it is that they, by their occurrence, give awareness of respectively. Their contents are the particular ways (cognitive and qualitative) in which they mentally apprehend (or take) their objects, or would mentally apprehend (or take) them in those cases in which their objects do not exist. I argue, inter alia, (a) that not all pulses of consciousness have objects, though James holds that they all possess cognitive content; (b) that centaurs can be neither objects nor contents of consciousness, since they do not, have not, and will not exist; and (c) that some hallucinations whose objects are not physically present have objects anyway, such as a long lost relative or a historical figure. I consider four psychologists' views with which I disagree, views proposing a consciousness without content (Gibson), a consciousness without objects (White), a consciousness of phenomenal items in a phenomenal environment (Henle), or a consciousness that systematically mistakes its constructed "objects" for their external counterparts (Yates).

James's (1890) stream consists of a "sensibly" (i.e., subjectively) continuous succession of unitary states, or integral pulses, of consciousness. These are the stream's minimal temporal sections that give veridical or nonveridical consciousness of, or as though of, something, which can be anything perceivable, feelable, imaginable, thinkable, or internally apprehensible. Each normal human being presumably possesses only one stream of consciousness, though it is sometimes held (e.g., Puccetti, 1989) that each of us has two streams, one in each cerebral hemisphere. People who have undergone complete forebrain commissurotomy may possess two streams (Sperry, 1977/1985). James decided thought was the best word to use to designate the pulses of mentality constitut-

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ing the stream of consciousness. Among the reasons for his choice, James (1890) gave, "[Thought] immediately suggests the omnipresence of cognition (or reference to an object other than the mental state itself), which we shall soon see to be of the mental life's essence" (p. 186). He followed through with discussion at length of five characteristics of the temporal components of the stream of consciousness including: "Human thought appears to deal with objects independent of itself; that is, it is cognitive, or possesses the function of knowing" (p. 271). I shall return to James's comments on the distinction between the object ("topic") and the content ("object") of a pulse of consciousness. Not all authors with similar views agree with James on the above, italicized claim. For example, Searle (1983, p. 1) distinguished intentional and nonintentional mental states. He gave "nervousness, elation, and undirected anxiety" as examples of the latter. I would travel far afield if I considered here whether we have nonintentional mental states. Since I am focusing on James's conception, I assume that all the basic temporal components of the stream are intentional.

#### "Content of Consciousness"

Let us set aside a certain useful sense of "content of consciousness." Some psychologists will speak of a content of consciousness meaning simply one of the various kinds of durational components of the stream (e.g., Shallice, 1988b, p. 310). Perceptual awarenesses, feelings, emotions, desires, thoughts, expectations, intentions, experiences of acting, and so on, are all contents of consciousness in this sense; they are among those Jamesian pulses or occurrent states of consciousness to which I have referred. Another individual's pulses cannot be contents, in this sense, of one's stream of consciousness. Those alien pulses can, of course, be "objects" of one's consciousness. For them to be such objects, one need only have thoughts about them, thoughts that are themselves contents, in the present sense, of one's present stream. But one's being conscious of something, even if this is itself an occurrent state or pulse of consciousness, is not enough for it to become a content of one's consciousness, in the sense I am setting aside: its belonging to one's stream. Similarly, though, for example, I can think vividly about a past emotional experience of mine, about how I felt when I received a certain piece of news, my past emotional experience is now long gone and cannot possibly be a content of my present stream of consciousness, no matter how vivid an object of my consciousness I make this past experience. (A cup on my desk, too, cannot be a content of my consciousness however long and well I perceive it.) This sense of content of consciousness can be useful to psychologists, but I shall here be concerned, instead, with only that content which is a property of James's individual pulses, rather than a property of the stream, that is, rather than content in the sense of being a durational component of it.

#### Two Concepts of Consciousness

#### General States

Calling the individual durational components of the stream "states of consciousness" may cause a certain difficulty, which leads me to prefer James's "pulses of consciousness." Lately, we have heard reference frequently to "altered states of consciousness" and, for a much longer time, we have used consciousness in saying that someone became conscious after having been unconscious. In conceiving of altered states of consciousness, the implicit contrast is to the "standard" or "baseline" general state of consciousness that people call "consciousness" or "being conscious," (i.e., without reference to something of which one may be "conscious," in the sense of the next subsection). I have interpreted this general state, and states "altered" relative to it, as modes of functioning of the mind-brain as a whole. See the concept of "consciousness<sub>6</sub>" in Natsoulas (1983). And while one's mind is functioning in the conscious, mode, the daydreaming mode, the nightdreaming mode, the drug, intoxicated mode, or in a meditational mode, and so on, consciousness "flows through" one's mind-brain, and this stream consists of the pulses lames characterized. James's stream of states of consciousness, in one sense, proceeds during states of consciousness in the operating-mode sense.

## Consciousness<sub>3</sub>

With the above comments on James's stream, I have in effect introduced the concept of consciousness that I use in the present article. Whatever else those pulses or occurrent states of consciousness comprising James's stream may be, they are awarenesses, or instances of what I referred to elsewhere as "consciousness<sub>3</sub>" (Natsoulas, 1983). Each particular pulse of consciousness is someone's being (veridically or nonveridically) occurrently aware of (or as though aware of) something or that something is the case. My parenthetical qualifiers cover such cases as visually experiencing tracks to converge, having the thought that the earth is flat, having visual, auditory, olfactory, or tactual experience as though of a fire-breathing dragon while one is either hallucinating or in a general state of dreaming sleep, and seeming to be moving one's arms which a drug has actually rendered immobile. In all such cases, there occur pulses that give seeming awareness of a nonexistent state of affairs (e.g., the tracks' converging, the earth's being flat), a nonexistent entity (e.g., a fire-breathing dragon), or a nonexistent event (e.g., now moving one's left arm).

The Oxford English Dictionary (OED) explicitly defines its third concept of consciousness simply as "the state or fact of being mentally conscious or

aware of anything," and the corresponding entry for conscious indicates that the possible objects of this kind of "consciousness-of" include facts, external objects, and one's mental happenings. Also, the OED states one can be "conscious<sub>3</sub>" that something, anything, is the case, which would seem to mean the same as being occurrently aware of a fact. Judging from the illustrative quotations for the third OED sense, one should probably add ostensible facts that are not actual facts ("factlike nonfacts") to the possible objects of consciousness<sub>3</sub>. The individual conscious<sub>3</sub> of a merely ostensible fact is conscious of it as an actual fact; to be conscious in the present sense of a fact or ostensible fact is mentally to affirm it, though this need not be deliberate or linguistic. Can one be conscious<sub>3</sub> of a fact one does not believe, even for that instant of being conscious<sub>3</sub> of it? The concept would seem to allow this only indirectly, for example, through consciousness<sub>3</sub> of a factlike nonfact denying the truth of the fact not believed.

Ambient optic array as object. It is interesting to find, in a recent discussion of Gibson's ecological approach, the following about "the ambient optic array": which is a crucial factor in visual perceiving and consists of the spherical geometric pattern of ambient light projecting from all directions to any particular point of actual or potential observation: "It is not an object in the environment (though it provides information about such objects), but neither is it an object of consciousness" (p. 750; italics added). Neisser (1990) also points out that the ambient optic array "is perfectly definite (rather than probabilistic), [though] its structure is rich beyond the possibility of linguistic description" (p. 750). However, Neisser does not mean that this array of light is unthinkable. Neisser may rightly mean (a) that the ambient optic array is not a content of consciousness; the array consists of light, after all, not of whatever might constitute pulses of consciousness. Thus, do not confuse the visual experience with either the structured light projecting to a point of observation, or the stimulus energy flux at the photoreceptors: "The optic array is in the external world rather than in the head" (Neisser, 1990, p. 750). Or, Neisser may mean, again quite rightly, (b) that the ambient optic array is not perceived; we do not have visual experience of the light by which we see the environment. See Gibson (1979, Ch. 4): "We do not perceive stimuli" (p. 55). The ambient array is not an object of the visual kind of consciousness, though it is obviously, very often in a certain circle of psychologists, an object of consciousness in thought.

# Consciousness Without Content: Gibson's Ecological Approach

The usual concepts psychologists apply to the stream of consciousness express explicitly or imply that the constituent durational states each have both object and content. However, in developing his ecological approach to

perception, Gibson (1979) proposed to proceed without a concept of perceptual content: "[Perceiving] involves awareness-of instead of just awareness. It may be awareness of something in the environment or something in [of?] the observer or both at once, but there is no content of awareness independent of that of which one is aware. This is close to the act psychology of the nineteenth century" (p. 239). As Reed (1987b) stated: "There is no distinction between seeing and 'seeing as' in Gibson's epistemology" (p. 105; cf. Coulter and Parsons, 1990, p. 259). No content belongs to the "psychosomatic act" of perceiving except for what the perceiver is perceptually aware of in the particular case. Of course, all such Gibsonian "contents" are distinct from perceiving them and the perceptual experiencing that is part of perceiving them.

I believe Gibson (1979) was making much the same point in his summary: "The term awareness is used to imply a direct pickup of the information, not necessarily to imply consciousness" (p. 250). That is, content such as the perspectival appearing to us of surfaces is not an object of straightforward visual perceiving (which includes awareness of the environment and oneself as part of it). Such content is the object of another kind of visual-system activity, which Gibson (1979) called "viewing the world in perspective, or noticing the perspectives of things" (p. 196), and which I called "reflective seeing" (Natsoulas, 1990). According to Gibson, this activity occurs upon adopting an "introspective" attitude. I have discussed the shift — from "visual field" (Gibson, 1963) to "seen-now-from-here" (Gibson, 1979) — in Gibson's thought about the objects of seeing-with-"introspective"-attitude (Natsoulas, 1989). And, varying his theory, I restored content to visual perceiving (with or without an "introspective" attitude) via the appearential perspective structure of experience (Natsoulas, 1990).

Almost immediately upon denying content, Gibson presents "A New Assertion About What Is Perceived," that is, what the objects are of our visual perceptual experience (e.g., places, attached objects, detached objects, persisting substances, and events). Thus, evidently, there seemed nothing further of a general kind to say about the awareness-of per se involved in staightforward visual perceiving, after Gibson explained that this awareness-of always has one or another object, but no content distinct from the latter, and proceeds continuously, not discretely. Perhaps how Gibson conceived of straightforward perceiving and its constituent experiential flux led him to downplay and even to attempt to exclude content. Perceiving and perceptual experience are temporally continuous processes, which "track" properties and events of the environment, and are constantly changing as the molar activity of perceiving picks up different stimulus information from moment to moment. The stream of perceptual experience is not constituted of distinct entities, nor even of distinct "entitative processes" (Sperry, 1976). The stream is a single, continuous tempo-

ral object without internal lines of division; experience does not consist of pulses, as James held. Whereas it seems natural to ask what a pulse of consciousness "contains," an ongoing process resonating to a stimulus flux will seem more amenable to description in terms of the environmental features the picked-up stimulus information is specific to (cf. Shanon, 1990, p. 146). At a high level of abstraction, one becomes like the world in perceiving it.

#### Criticism

It is a further question whether Gibsonian psychology can proceed without a concept of content, that is, with a kind of bare perceptual experience characterizable simply in terms of the objects of perceptual experience and the stimulus information picked up and "resonated" to. The following two considerations, among others, suggest it cannot. (a) Does not "a stream of experience" (Gibson, 1979, p. 253) already imply a property of content amounting to how whatever is being experienced is being experienced, that is, a changing and transforming phenomenological structure (with both "variant" and "invariant" features; Natsoulas, 1990) as the stream proceeds? People do experience the environment, there occurs "an experiencing of things" (Gibson, 1979, p. 239); they do not just respond to it discriminatively (Skinner, 1976). As I argued against E.J. Gibson (1982) and Heft (1989), theoretically placing "meanings" (affordances) in the environment does not explain perceptual meaning (content; Natsoulas, 1991). (b) And if, as Gibson held, language makes explicit what is already implicit in perceptual awareness (e.g., "There has to be an awareness of the world before it can be put into words" [Gibson, 1979, p. 260; cf. Gibson, 1966, pp. 281-282; Reed, 1987a]), is it not content that gets expressed, dimensions or aspects of perceptual content, that is, how one is aware of (how one takes experientially) what one is aware of in the world?

Also, the externalization of content, that is, its theoretical identification with the objects of perceptual experience, may leave Gibsonians more vulnerable than they would otherwise be to James's (1890) psychologist's fallacy (see later). Because Gibsonians are not explicitly concerned with the contents of the experiences they are investigating, they may more easily assume the subject is experiencing the environment or display as they are. If the evidence shows a subject is picking up information specifying certain environmental properties, the subject may be assumed to perceive those properties in the way, with the content, exemplified by the psychologist's experience of those properties. As Wild (1970) commented on James's fallacy, "We tend to regard thought in general as a sort of replica of the object in the mind" (p. 38; Skinner, 1964, pp. 86–87).

#### Consciousness Without Objects: White's Nonrelational Concept

Even White's (1986; cf. White, 1988) very unusual "nonrelational" concept seems to require content. White sought to develop a noncognitive concept of consciousness according to which no pulse of consciousness is about anything; no "conscious event" has an object, whether itself or anything else. Nevertheless, White conceived of consciousness as having content; for example, a conscious event may possess a "blue-light-like" content and represent a blue light that caused the conscious event to occur (White, 1986, pp. 511–512). But this "representation" is noncognitive, merely resemblance between content and blue light at a high level of abstraction. No pulse is a consciousness of anything, not even of what it "represents." Consciousness of anything would be necessarily "relational," and no "relational consciousness" exists. One wonders how White can have, for example, thoughts about consciousness.

Other psychologists who use a concept of mental representation normally conceive of mental representations as conscious or nonconscious mental apprehensions (or would-be apprehensions of something, in cases analogous to failed linguistic reference). However, psychologists may also treat of representations as used for a purpose, to represent something else, analogously to using language or visual art. And mental representations may be treated as standing in for something else, and so as necessarily apprehended (e.g., Velmans [1990, p. 93]: "The world as-experienced is a representation"). However, the usual intention in deploying a concept of representation is not primarily to refer to objects of awareness, but to refer to mental states in their own right, with their own intentionality, contents, and objects.

There may be question, of course, regarding whether such a consciousness as White's, which is never a consciousness of anything, can properly be said to have a content. White's example of a "blue-light-like" content suggests that what he had in mind were pulses of consciousness with qualitative contents and nothing cognitive about them. What sort of occurrence did White have in mind? Think of an animal undergoing pain with no consciousness of a body part or anything else, including its pain. The animal's pain causes it to behave in special ways, and the central state that is the animal's pain also produces other physiological occurrences, including other "conscious events," which also have purely qualitative contents. (An improved grasp of White's conception may result from relating it to Nelkin's [1989] "map.")

## Difference from James

The difference should be evident between a view like White's: no pulse of consciousness ever has an object, and a view that holds: not all such pulses have an object. Although the latter was clearly James's (1885/1978) view, he

was not led to extirpate from the cases of consciousness-without-object all but their purely qualitative content; these do not end up in James's thought as equivalent to White's conscious events. James (1885/1978) stated that a pulse of consciousness "is not a particle altered by having the self-transcendent function of cognition either added to it or taken away. The function is accidental; synthetic, not analytic; and falls outside and not inside its being" (p. 186). The self-transcendent function of cognition is its being about something, as opposed to its being merely as though about something. A pulse of consciousness without an object is no less cognitive, and need be no different in content for not having an object; it no less possesses the property of intentionality. James's point later was expressed on a bigger stage: "The general theme of Husserl's phenomenology is intentionality, the peculiarity of consciousness to be directed, to be as if it is consciousness of something" (Føllesdal, 1974, pp. 377–378).

# Pulses of Consciousness: Object-Content Distinction

We must address James's pulses in terms of (a) their objects: what a particular one or more of them mentally apprehends and (b) their contents: how, the particular cognitive and qualitative ways in which, they apprehend their objects. As I understand the distinction between object and content, it is between (a) something that may be entirely independent of consciousness (e.g., the sun) though, as object of consciousness, it stands in a certain relation to consciousness, and (b) something that is a variable property of consciousness and depends for its various particular exemplifications on the occurrence of different pulses of consciousness, to which the particular contents belong.

## Objects of Consciousness

When a particular pulse has an object, the object is whatever, in the world or stream, that pulse gives consciousness of. The object of consciousness need not be a physical object; it can be anything that exists, has existed, or will exist, and can be thought of, felt, dreamt of, imagined, perceived, hallucinated, wished for, remembered, or apprehended by inner awareness of the mind-brain itself. And there is no requirement that a consciousness-with-object be veridical. You can hallucinate an actual someone saying something. You can hallucinate a dead relative waving to you in front of your house.

Hallucinations with actual objects. But is such a case as the latter properly a case of consciousness-with-object? Føllesdal (1974) stated, "In the case of hallucination, the hyle one has [i.e., Husserl's version of sense data] cannot be regarded as brought about by some causal chain in which the object of the

act [i.e., of the pulse of consciousness] plays a part, there being no object of the act" (p. 384). This statement contradicts my view that hallucinations sometimes have actual objects that may or may not now be physically present to the hallucinator. The alternative seems to be that the object of a pulse of consciousness must be part of the proximal causal chain producing that pulse. Obviously this is not necessary; one can remember events that took place long ago. Long causal chains from the past to pulses of remembering involve these pulses' objects, and the same is true in hallucinating a long lost relative.

It may be responded that you remember your long lost relative as being where she actually was, but you hallucinate her where she is not. Surely, however, one's visual experiencing does not lose its objects whenever the light that its objects project to our point of observation is bent or delayed so that the objects are visually experienced to be where they are not. Similarly, we overhear a conversation whether we take it, rightly, to be proceeding in the room above our own or, wrongly, in the next room to our right. (I would go further: as far as overhearing a conversation is concerned, it does not matter whether the conversation is taking place or a recording of it is playing in the next room; cf. hearing lightning, seeing an extinguished star and, through motion pictures, watching Chaplin dance.)

Husserl (1913/1983) stated about the purely hallucinatory case, "Only the perception remains, but there is nothing actually there to which it is related" (p. 215). Husserl's example was visually hallucinating a blossoming apple tree in an actual garden. I have two comments. (a) The pulses of consciousness involved in this particular case are such that they could have been veridical consciousnesses if they had occurred under different conditions, which is not true for hallucinating a fire-breathing dragon since no such thing exists. (b) There may have been, the previous year something actually there to which the present "perception" (i.e., hallucinatory experience) is related as consciousness to its object. One may be hallucinating a certain tree that was in fact growing in the garden the previous year. This is the same kind of case as your hallucinating a long lost relative. The hallucination is of her though she is not there, in front of your house or anywhere.

Existence requirement for object of consciousness. However, something that has never existed and will never exist (X) cannot be the object of anyone's consciousness, though X can be an "apparent" object of consciousness. "Apparent" means that it can seem as though X were an object of one's occurrent state, or that one's consciousness can be as though it is, when it is not, of an actual object X. The latter covers the nonreflective cases wherein one has no inner awareness of the respective pulses of consciousness having X as their "apparent" object. I do not imply, of course, that anything that has existed is, ipso facto, the object of any instance of consciousness that is intrinsically so that it could have it as its object. One of my perceptual awarenesses

of an indistinguishable twin does not have the other twin as its object, though the content of the present awareness may be exactly the same as one I had yesterday of the other twin.

Some psychologists prefer to hold, consistently with the subject's perspective, that all hallucinatory and all other pulses of consciousness possessing intentionality have an object. A subject may not discriminate a pulse of consciousness-without-object from a pulse of consciousness-with-object. However, whether a certain particular pulse of consciousness has an object is not a phenomenological question (what is the subject's particular experience like?) but an ontological question (is there something in the world of which the subject is conscious?).

The existence requirement for aboutness has these advantages. (a) The world is not partially populated with nonexistent objects. (b) The slide is avoided to being conscious of mental objects whenever conscious of anything, even when seeing what is before our eyes. (c) Our living each in a private world is prevented.

Consistently with the view that I am expressing, Brentano (1911/1973) stated, "If someone thinks something, the one who is thinking must certainly exist, but the object of his thinking need not exist at all . . . . So the only thing that is required by mental reference [i.e., by intentionality] is a person thinking" (p. 272). Obviously, Brentano does not mean successful mental reference, which both aims, as they say, and finds its target.

My view is consistent with Husserl's (1900/1970) where he writes (for Husserl's "merely intentional," substitute my "apparent"), "'The object is merely intentional' does not, of course, mean that it exists, but only in an intention, of which it is a real . . . part, or that some shadow of it exists. It means rather that the intention, the reference to an object so qualified, exists, but not that the object does" (p. 596). Husserl is saying that pulses of consciousness with only "apparent" objects have contents ("intentions") no less than pulses whose objects are not "apparent," whose objects do exist. Also consistent is Searle's (1982) statement: "An Intentional object is just an object like any other; it has no peculiar ontological status. To call something an Intentional object is just to say what some intentional state is about" (p. 267). Searle drew a parallel to the "referred-to object" of a speech act. If there is no object satisfying the propositional content of a speech act, then there is no "referred-to object" for this speech act. We do not need to postulate entities for speech acts with failed reference to be about. They are not about anything; the same applies to many pulses of consciousness.

Neither object nor content. Psychologists will need to distinguish what is an ingredient of those pulses of consciousness (e.g., contents) from what is not (e.g., actual or apparent objects). Husserl (1913/1983) warned against confusing pulses of imaginal consciousness with their apparent objects:

Obviously the centaur itself is nothing psychical; it exists neither in the soul nor in consciousness, nor does it exist somewhere else; the centaur is indeed "nothing," it is wholly "imagination;" stated more precisely: the mental process of imagining is the imagining of a centaur. To that extent the "supposed-centaur," the centaur-phantasied, certainly belongs to the mental process itself. But one also should not confuse just this mental process of imagining with what is imagined by it as imagined. (p. 43)

Pulses of imaginal consciousness must be carefully distinguished even from the imaginary entitities that may be their apparent objects. In what sense does a nonexistent centaur "belong to" the respective pulses of consciousness that we call imagining a centaur? Since a centaur is nonexistent, it cannot belong to anything, and nothing can belong to it. "Imagining a centaur" does not refer to a relation, since the second term in the purported relation has, had, and will have no existence. As Husserl stated, the respective pulses of consciousness should not be confused with a centaur. Nor should the centaur be considered an ingredient of pulses of consciousness. It is a merely apparent object of consciousness, which is to say it is nothing; and, therefore, it is neither a content nor an object of consciousness. Rather, the relevant pulses of consciousness are intrinsically as though they had a certain centaur as their object, just as other pulses of consciousness are intrinsically so as to have Sigmund Freud himself as their object. Of course, Freud is not a component of the pulses of consciousness about him. Nor was he a component of any pulses of consciousnesses that were about him when he was still alive, not even those that took place in Freud's presence, or in his very own "perception-consciousness system" of his psychical apparatus. The latter pulses were occurrent parts of Freud; he was not a part of them.

# Contents of Consciousness

In discussing the sense in which a pulse of consciousness has an object and what that object may be, James (1890) seems to identify the object with part of the content, the point being that what is called the "object" by psychologists is an abstraction from a whole that is the actual object of the particular pulse of consciousness: "But the *Object* of your thought is really its entire content or deliverance, nothing more or less" (James, 1890, p. 275). James considers it a distortion ("a vicious use of speech") to perform the abstraction that singles out Columbus as the object of a thought about him, a thought that Columbus discovered America in 1492. However, James does not deny that this thought is about Columbus; Columbus is the thought's "topic." James could say that many different thoughts about Columbus have occurred and will occur; they are not all the same thought, they do not have the same content, simply because they are all about Columbus. This is an important point but does not require that content be considered object.

In James's analysis, the distinction remains useful between that which one thinks of and what one thinks about it in having that thought. Although he called it "object," James (1890) well identified the content of a thought: "neither more nor less than all that the thought thinks, exactly as the thought thinks it, however complicated the matter, and however symbolic the manner of the thinking may be" (p. 276). The content of a pulse of consciousness is how, qualitatively and cognitively, that pulse of consciousness gives awareness of its object, or as though of its object in those cases (e.g., hallucinating a fire-breathing dragon) of consciousness-without-object. We are asking about content when we ask, "In that pulse of consciousness, how is its object taken or experienced? And in that other pulse of consciousness, what is the as-though-taking-or-experiencing-its-would-be-object like?" If one thinks of the pulses of consciousness, or some of them, as presentations or representations, then the question about content is how a certain pulse of consciousness presents or represents its object, assuming it has one. Also, a pulse of consciousness may be as though presenting or representing an object, and we can ask also about its content by asking how it does this. When you report the contents of your consciousness, you report what you are experiencing, how or the way you are conscious or aware of the actual or apparent objects of your consciousness, what you are thinking, or what you are taking (or mistaking) to be the case.

Without a concept of content, specifically, a conscious pulse's possessing a content possibly distinct from the content of all other conscious pulses, even from temporally adjacent conscious pulses, it may not be possible to deal in a satisfactory way with consciousness in the present sense. Here is a typical, psychologist's statement about a certain process that would seem not adequately describable if one eschewed reference to content: "There are sudden inconsequential changes in 'the stream of consciousness' whereby new representations and thoughts intrude, unwilled and unheralded by any related content" (Bisiach, 1988, p. 114). Those intruding representations and thoughts are "new" in that they have different and unrelated contents relative to representations and thoughts recently preceding them in the stream of consciousness. Content is the relevant dimension of difference in this case and in many others of psychological interest.

Marcel (1988) argued that the contents of "phenomenal experience" affect psychological processing, and that they "may mediate causal connections." But the object—content distinction does not recommend itself to all psychologists who discuss consciousness. For example, Shallice (1988b) seems to be conflating object and content of consciousness: "Almost all experiences have contents — what one sees, hears, remembers, feels: the so-called property of intentionality . . . . The contents are the objects of mental operations — one hears A, guesses B, remembers (as an act) C, imagines D . . . . These include

markers to future action — one intends X, gets ready for Y" (p. 314). Does Shallice really mean that what one sees are the contents of one's visual experience? Are A, B, C, D, and so on, contents or objects of consciousness? Clearly, they are, as Shallice states, the objects of those "mental operations" that he lists. The italicized letters would seem to refer to items distinct from the mental operations said to have the respective items as their objects. This can be gathered from the fact that these objects might not exist or come into existence yet the mental operations could be the same, including the pulses of consciousness that are a part of those operations. If A, B, C, D, and so on, were contents in the sense I have explained above, then Shallice would not be making the same statements about them. We normally do not speak of seeing, hearing, feeling, guessing, remembering, imagining, intending, or getting ready for a certain content of our mental operation or consciousness. This is not to say that none of our pulses has reflexive content, that none has itself as object. Nor do I mean some of one's pulses are not about the contents of others of one's pulses.

Similarly to Shallice (1988b), Marcel (1988) identified the "content" of phenomenal experience with "what is being perceived, remembered, solved, enacted" (p. 150). However, Marcel also spoke of the "meaning" or "significance" of the content. This may be a way of capturing the object—content distinction in different words (thus, the "content—meaning" distinction). Indeed, an interpretation which is sometimes given of content, or one kind of content, is its being equivalent to or similar to meanings. Just as utterances have meanings, cognitive mental states have their own kind of meanings, whether or not those states are themselves linguistic. Thinking of content as like the meanings of utterances may help in grasping the object—content distinction. I may emit a certain utterance that says something about something in the world. Clearly, there is a distinction between the latter and my utterance about it; so too, the meaning of my utterance cannot be identified with what the utterance is about. My utterance does not lose its meaning if, just as I am emitting it, whatever I am referring to ceases to exist.

## Psychologists' Attributions of Object and Content: Two Fallacies

A frequently committed phenomenological fallacy is analogous to James's (1890) "psychologist's fallacy." Both pertain to what psychologists may erroneously ascribe to pulses of consciousness. I consider James's fallacy first.

# James's Psychologist's Fallacy

Psychologist's awareness of object. When the psychologist treats of someone else's consciousness, he or she will normally identify each pulse of conscious-

ness, or larger temporal section of the other's stream, in terms of its object or objects: "[The psychologist] ordinarily has no other way of naming it than as the thought, percept, etc., of that object" (James, 1890, p. 196). The object of consciousness, is whatever that part of the stream happens to be of, whatever it is awareness of. There is nothing wrong with doing this; the fallacy enters when the psychologist attributes a content to consciousness based on how the psychologist — but not the subject, as it happens — is aware of the object: "We describe the things that appear to the thought, and we describe other thoughts about those things — as if these [thoughts] and the original thought were the same" (James, 1890, p. 278). Pulses of consciousness with the identical object can vary greatly in their contents. They should not be treated as the same simply because they have the identical object. According to James, psychologists tend to suppose that a pulse of consciousness is, in content, the same consciousness of its object as is the psychologist's own consciousness of this object.

Psychologist's knowledge about consciousness. The subject is not conscious of the various relations, about which the psychologist may know, that exist between the subject's consciousness and other events (James, 1890, p. 197). Thus, a pulse of consciousness's participating in a network of causal relations does not mean this network, in part or whole, is object of this pulse. A pulse of consciousness apprehends only its object, not all that is relevant to its occurrence or to the psychologist's explanation of it. Similarly, a state of consciousness that recurs or resembles another state of consciousness should not be confused with a consciousness of its recurrence or of the resemblance (James, 1890, p. 353).

I would add that even the aboutness relation between a pulse of consciousness and its object (or any other relation to its object) is not something of which the pulse of consciousness need give consciousness of. In other words, if pulse, is about A, this does not mean that pulse, is also about pulse, 's being about A (or, e.g., about A's being a cause, which it is, of pulse,). James would put the point more strongly than I just have. He would say that pulse, cannot give awareness of its relation to its object, of this aboutness relation, because no pulse of consciousness can be a consciousness of its own occurrence (the same for any other relation between pulse, and its object). Unless another pulse of consciousness occurs that has pulse, as its object, there is no consciousness of pulse, though pulse, is itself a pulse of consciousness of, or as of, something else. Though pulse, is a consciousness of A, pulse, cannot be a consciousness of A as object of pulse, because this would require pulse, be a consciousness of itself. Pulse, cannot have itself even partly as its object (James, 1890, pp. 189–190).

Psychologist's awareness of subject's consciousness. "Another variety of the psychologist's fallacy assumes the mental state studied must be conscious of itself as the psychologist is conscious of it" (James, 1890, p. 197). In com-

menting on this variety of the fallacy, Wild (1970) stated that, for the psychologist who is studying a subject's stream of consciousness, the constituent pulses are objects of the psychologist's thinking; therefore, this makes it easy for him or her "to fall into a representative theory of consciousness and to think of the person he is observing as knowing the contents of his own mind as objects that intervene between him and the things outside" (p. 39).

I would add that the psychologist's being conscious of, having thoughts about, a pulse or segment of a subject's stream of consciousness does not mean that the subject's consciousness, too, is necessarily conscious of itself, in the same way as the psychologist is conscious of it, or in any way. That is, it is not meaningless to propose that a pulse or segment of a stream of consciousness occurred without its being itself an object of consciousness at any point. Zelazo and Reznick (1990) stated otherwise: "Intentionality implies concurrent consciousness. Intentional states consist in the actual representation of something from a perspective, and the only perspective coherently available to us is that of our conscious mind" (p. 632). Perhaps, these authors invoke a necessary consciousness of intentional states because, whenever a psychologist theorizes about intentional states, the psychologist has these states consciously as objects before his or her mind. And so, perhaps, it is easy to think of the subject's intentional states as necessarily in that status, as coming before the subject's mind whenever they occur; one may propose, therefore, that pulses of consciousness, whatever else they may also be, are essentially objects of inner awareness. It would seem closer to the truth to hold that one's intentional mental states themselves constitute one's perspective on the world whether or not one has inner awareness of them. But, about nonconscious intentional states, Zelazo and Reznick (1990) asked, "Who (or what) stands in relation to the object?" (p. 631), implying that the perspective such states themselves provide does not adequately relate the subject to the object; evidently, there must be a further, conscious perspective, like the psychologist's who is inquiring about intentional states.

## Phenomenological Fallacy

There occurs an analogous phenomenological fallacy. It involves expanding content, importing into pulses of consciousness their actual or apparent objects, as James (1890) opposed:

The psychologist's attitude towards cognition will be so important in the sequel that we must not leave it until it is made perfectly clear. It is a thoroughgoing dualism. It supposes two elements, mind knowing and thing known, and treats them as irreducible. Neither gets out of itself or into the other, neither in any way is the other, neither makes the other. They just stand face to face in a common world, and one simply knows, or is known unto, its counterpart. (p. 218)

However, I do not rule out that a pulse may have itself as part of its object. But, often, it does not, and it is with reference to the nonreflective cases that I express the present point. The phenomenological fallacy is (a) that a consciousness of something constitutes its object, "makes" its object, and not in the mere sense of selecting it; or (b) that the processes responsible for consciousness of something are, simultaneously, responsible for bringing the latter into existence. Accordingly, the object of a pulse comes into existence and goes out of existence with that pulse and other pulses of consciousness that have the same object; no object of consciousness has separate existence from the consciousness that has it as object.

However, the latter does not purport to be a description of how one is conscious of the object, how one takes the object to be in being conscious of it. Actually, one may perceptually take the object to have already existed before one became perceptually aware of it, and not to go out of existence when one ceases having perceptual awareness of it (Michotte, 1950/1991). The issue is not a phenomenological one about contents; the phenomenological fallacy is ontological. It is an error regarding the mode of existence of the objects of consciousness. The fallacious assumption is that whatever we are conscious of must be a part of our consciousness.

Do you belong to my consciousness? The aboutness relation is wrongly understood as more intimate than it very often is. The objects of our consciousness are in very large number distinct existences from the pulses by which we have awareness of them. For example, when I am in your physical presence, I can have perceptual consciousness of you. And, of course, you will agree with me that you are not a component of my experience; you do not come into and go out of existence depending on whether I am having perceptual experience of you. If you, dear reader, are one of my parents, then you were there before I was born, living in the same house where I am now having perceptual consciousness of you. While we sit in the living room, you may point to a lamp and say, "This that you are looking at is a percept; it is part of your experience and exists as such." But I doubt you would point to yourself and say the same: that your mode of existence is phenomenological, that you exist insofar as someone experiences you. (Similarly, some psychologists assert consciousness is a "construct," as though they bring this natural phenomenon into existence by the power of their thought.)

## The Phenomenal and the Physical: Gestalt Psychology

In the Gestalt psychological tradition, Henle (1974, 1977) has argued that what we have perceptual experience of are always phenomenal objects, which exist internally to the perceptual process. More accurately, I should say that Henle held phenomenal objects to exist in a phenomenal environ-

ment distinct from the physical environment, which includes our own brains. Henle (1974) stated, "The world we see and feel is the phenomenal world, not the physical world, and thus it is not the source of stimulation, nor is it, as such, the business of physical science" (p. 41). In the Gestalt view, we cannot experience physical objects. Our perceptual systems cannot, as it were, reach the external world to give us firsthand awareness of it. (See Koffka's [1935] distinction between behavioral and geographical environments and Köhler's [1947] discussion of the difference between one's physical organism and body; cf. Henle [1977] on "the phenomenal self.") The phenomenal world results from stimulation and brain process yet is distinct from all parts of the physical world. Gestalt psychology is an epiphenomenalist dualism; consciousness is an inefficacious effect of stimulation and brain process.

Thus, there is a reification of our perceptual pulses. They are each implicitly divided into two parts, of which one belongs to a world of phenomenal things. A certain event (a pulse or succession of pulses of consciousness) is partially conceived as involving in its very constitution one or more entities, the object or objects of consciousness. This is to turn what is not a thing into a thing; while the environment that, in my view, we actually do perceive is theoretically dislocated into a nonexistent phenomenal space, and misdescribed as a reified portion of our pulses of consciousness.

In a constructed dialogue between Gibson and herself, Henle (1974) has Gibson say that she is locking herself up in a world of subjectivity. Henle does not accept this verdict: "We keep in touch with the physical world because our phenomenal world is, on the whole, veridical" (Henle, 1974, p. 41). Henle means what we are aware of corresponds to, though it is not, a part of the physical world causing our perceptual awareness.

#### Criticism

The following two objections require a response from anyone who subscribes to a view like the Gestalt view, including those who contend we perceive representations, rather than each other and other parts of Gibson's (1979) ecological environment.

First objection. If our perceptual experience is largely veridical, does this not mean the environment possesses some of the properties we perceive phenomenal objects to possess, that we perceive some of the environment's own properties?

Consider three examples: (a) We visually perceive a building going up in flames (cf.-Husserl, 1913/1983, p. 216; James, 1912, p. 14). According to the Gestalt view, we perceive not a physical building, but a phenomenal building that is phenomenally going up in phenomenal flames. But physical objects and not phenomenal objects can burn; the latter only seem to burn —

phenomenal environments do not contain oxygen. And we do not seem to ourselves to be perceiving a seeming building seeming to burn; we seem to watch an actual building actually burning. And this that we seem to perceive is in fact what is happening; our visual experience is veridical. (b) A phenomenal mosquito cannot puncture our phenomenal skin, it can only appear to do so. The causal event of puncturing, which we accurately perceive, is not a relation between those two phenomenal things, but between their physical counterparts. (c) When we see something, we are normally not aware of it as coming into existence just then, but as having been there before we saw it. The latter is true of the physical thing but not true of the phenomenal object we are supposed to be perceiving instead. The phenomenal object comes into existence with the pulse of which it is the object.

Such examples can be multiplied (cf. Kent, 1984, p. 28). Thus, insofar as we are held to perceive veridical phenomenal objects, we must be held perceptually to ascribe to them many properties they do not and cannot possess. Those properties that, it is supposed, we take phenomenal objects and events to possess are very frequently properties of objects and events that are the "distal stimuli" responsible for the occurrence of those phenomenal objects and events. Now, if we can be directly aware of such "nonphenomenal" properties (i.e., which only illusorily belong to phenomenal objects), if such properties appear to us firsthand, noninferentially, as though they were properties of what we are perceiving, why should theorists insist that what we perceive to have such nonphenomenal properties is something else, other than what actually possesses them?

Second objection. Henle and the other Gestalt psychologists grant we have consciousness, in the form of thoughts, of the physical environment. For example, Henle (1977) stated, "From the physical object, whose existence nobody challenges, are reflected light beams of varying frequencies and intensities; these reach the eye from different directions" (p. 187). Some of our pulses of consciousness have as their objects parts and aspects of the physical world as distinct from the phenomenal world. Somehow our thoughts can reach beyond themselves whereas our perceptual awarenesses cannot. The obvious question crying for an answer is why pulses of consciousness lying at the end of an inferential chain that begins with perceptual experience (or awareness thereof) can be about something that is a cause of that experience, whereas the perceptual experience cannot be about (of) that cause in the physical environment? A shorter segment of the same causal chain necessitates a distinct phenomenal object, whereas an extension of the causal distance from the physical object brings the mental apprehension to the physical object itself as its object! The consistent Gestalt position, though erroneous, must be that all the objects of any consciousness of any kind that we may have are phenomenal objects, that is, are constituted by consciousness of them or by

the processes that produce the pulses having those phenomenal objects. Yates (1985) recently argued the latter, more consistent view. In the following, I use awareness in place of pulse or state of consciousness, because Yates used it for the same occurrences.

#### A Private World with No Way Out: Yates's "Objects"

Yates (1985) wished to describe properties of awareness, a form of "representation" taking place at only one point of "the human informationprocessing system." Yates's concept of awareness was "defined by its reportable content," and was "intended to correspond to the subjective experience of awareness." A conceptual scheme for awareness can be developed, some psychologists hold, starting from how awareness seems firsthand; thus: "An image or model of the nature of awareness . . . is unnecessary for us because we experience awareness directly" (Yates, 1985, p. 249; cf. Price [1960, p. 79]: "Everyone already knows for himself what it is to be aware of something, because he himself is constantly being aware of things"). Yates wrote of the "content" of awareness by addressing the properties of "objects." The question of what we are actually aware of applies to every awareness since every instance has an "object." If you hallucinate a dragon, your mind has "constructed" an "object" of which you are aware; when you are ordinarily said to be perceiving a pet dog, the "object" or "construct" of which you are aware is as much an "object" or "construct," and as private as your "construct" of a fire-breathing dragon. Yates proposed that we "always and only" are actually aware of "objects, events, and states of affairs" that our mind "constructs" by means of nonconscious mental processes. Thus, Yates's view seems to make it impossible for us to "break out" of our individual minds. When Yates is teaching a class, the students are aware only of a "construct" distinct from the human being, born of certain parents, who Yates is. Their awarenesses cannot be of Yates. Each student in the class is aware of something different, not simply something different about Yates. Yates cannot construe this example in the most reasonable way: different awarenesses, all perhaps with different contents, yet all with the identical object: Yates himself (cf. Third objection below).

The nonconscious mental process that provides awareness with its "objects" is distinct from awareness itself, according to Yates, and not accessible, as awareness is, to inner awareness. Being a process of "constructing an account," or the like, the process producing "objects" must involve some kind of reasoning or inference. For example, in the case of perceptual awareness: "The process that results in awareness hypothesizes a source for the sensations arising in various systems; the hypothetical construct 'explains' why just those sensations occurred" (Yates, 1985, p. 250). In constructing an

"object," the mental process may "deem irrelevant" certain details. The involvement of reasoning and inference is no doubt why Yates called "mental" the process that provides awareness with its "objects." Yates held nonconscious thoughts to have content and to be about such things as sensory activity and its possible environmental and bodily causes (cf. Fourth objection below).

What is the ultimate nature of Yates's "objects?" I believe all of Yates's "objects" are mental in the sense that they belong to the instances of awareness by which we are aware of them. In Yates's view, it is impossible that an instance of awareness occur lacking an "object." The nonconscious mental process that produces an awareness also produces its immanent "object." The "object" of an instance of awareness is not distinct from that instance of awareness; it is literally part of the awareness. (This identification may provide Yates with an answer to Husserl's [1913/1983, p. 219] objection that awareness of an immanent object would require a further immanent object.) It follows that we can be actually aware only of something about our awarenesses.

Ordinarily, we are not aware of our "objects" as mental "constructs" or as internal to our awareness; we ordinarily take the intentional objects "to exist in the external world" (Yates, 1985, p. 250). According to Yates, we thus commit a systematic "mistake," since our intentional objects cannot be part of the external world. Yet this systematic error does not get us into trouble. On the contrary, the properties of our "objects" that we take to be properties of corresponding parts of the external world are ordinarily, and fortunately, actual properties of these external counterparts. Yates described the "objects" of awareness as "simulations" of external counterparts, and X is a "simulation" of Y, it would seem, depending on their sharing properties. If X fails to share certain properties with Y, then X fails to be an "adequate simulation" of Y. Indeed, Yates stated that physical properties enter into the composition of "objects."

Are "objects" representations by which we are aware of their external counterparts, or are they that of which we are aware, albeit mistaking them for their external counterparts? The latter would seem to be Yates's view, though perhaps not consistently: soon after claiming that we ordinarily mistake our "objects" for "stimuli" (distal stimuli), Yates (1985) stated that they "represent typical stimuli" (p. 250), and "represent patterns of the environment relevant to a set of actions that might be taken" (p. 252). What is the difference between their representing and being "objects?" If "objects" are representations, then "objects" are mental apprehensions of something else; the production of an "object" in the stream of thought would make us aware of what the "object" represented. It might be suggested that "objects" are representational components of awarenesses. In that case, they would be part of the structure of an awareness rather than, again, that upon which the awareness is directed (except if an awareness can have itself as part of its object, as James [1890] denied).

However, for Yates, "objects" are not representations in the sense just indicated. An "object" functions to "represent" in a different sense, by being mistaken for something else, an external counterpart. It "represents" by standing in for something of which we cannot be aware (cf. Second objection below). We must be aware of our "objects," and only by being aware of them and their properties can we behave adaptively and secure our aims in the world. For example, the object on my desk must have properties I am aware of the corresponding "construct" as having. This is why I succeed in reaching for the pencil itself (not for the corresponding "construct"!). This error-based process works because our "objects" are "adequate simulations." If our intentional objects did not possess the relevant properties of the external counterpart involved in the action, we would be in bad trouble. Our fundamental "mistakes" involve truths about the external world. What always is in error is taking what we are aware of (as having these properties, which it does) to be part of that world (cf. First objection below).

#### Criticism

Before I discuss four problems to which this treatment of awareness and its objects leads, let me emphasize: Yates's proposal applies to "all awareness," that is, to "all conscious thought" as well as to all perceptual awareness.

First objection: Some nonveridical awareness of "objects" is veridical awareness of their external counterparts. Consider any environmental object, event, or state of affairs about which you can have an extended sequence of conscious thoughts, or so you believe contrary to Yates's proposal. This might be the motor of your automobile, about which you know a great deal. In this example, every one of your thoughts happens to be correct; the motor possesses all the properties your thoughts attribute to it. According to Yates's account, however, none of your conscious thoughts has the motor as its object. The motor exists in the external world, was in the world even before you first saw the automobile, whereas the objects of all awarenesses are constructed "simulations." Also, the properties that enter the stream when you seem to be thinking about the motor are properties of the corresponding "object." Thus, Yates did not hesitate to state that some "objects" have "three-dimensional, spatial qualities." An adaptive and correct attribution of properties is effected by mistaking one's "object" for an external entity.

Awarenesses must possess such properties, given Yates's account of the relation of awarenesses to their respective "objects"; an "object" is not distinct, evidently, from the instance of awareness that makes us aware of it. The "object" is somehow a real component of an instance of awareness while being at the same time that of which this awareness makes us aware. The same unconscious mental processes that produce particular awarenesses pro-

vide them with their "objects." Awareness is not awareness of any of its causes, including the nonconscious processes that produce it. Awareness has to be, in Yates's view, awareness of something in the awareness; the problem of perception purportedly has inner awareness at the core of its solution (cf. Clark, 1982). The apprehended "object" corresponding to your car's motor is not an awareness of the motor, or otherwise of or about the motor. Rather, you are aware of properties of the "object" itself, some shared by the motor.

Since an "object" is not distinct from the respective awareness, the "object's" properties must belong to the awareness of it. How is this possible? Although Yates did not propose the following answer, it might hold some appeal to him: In being aware of your immanent "object," you mistakenly take this "object" to possess certain properties actually possessed by the motor. Yates might argue that, of course, the "object" does not literally possess, for example, the substance and temperature of the motor. And by mistakenly taking the "object" to possess these particular properties and mistaking it for the motor itself, you correctly take the motor of your car to possess the properties, and you are thereby enabled to take effective action with respect to this part of the external world. Therefore, that of which we are "always and only" aware neither is ordinarily recognized by us for what it is, namely, a constituent of awareness itself, nor are our awarenesses of its properties necessarily veridical.

A line of argument, such as this, that claims an "object" is (mis)taken to possess the properties its external counterpart possesses, while the "object" is (mis)taken for the external counterpart, should be acceptable to Yates. He has already accepted it with respect to the property of belonging to the external world. One's "object" of awareness is immanent, yet mistaken for something external to the awareness. Thus it does not possess a property one is aware of it as possessing. This property may include a specific location in the environment, or body, the location of its external counterpart.

I take it, therefore, properties do not have to be exemplified by awareness, or by its immanent "objects," for awareness to ascribe properties to its objects. And if such ascription takes place without the immanent exemplification of the ascribed properties, why cannot awareness ascribe them to something that also is not immanently present: that is, to something in the external world? Though lacking an immanent "object," our thoughts and other awarenesses would have content. And some awarenesses would have objects external to them, while other awarenesses would have no object.

Second objection: To mistake your "objects" for their external counterparts is to have thoughts about the latter. Yates's account, in the end, requires thoughts about environmental and bodily objects, events, and states of affairs. If I am correct, Yates cannot ignore intentionality, explaining how awareness manages to have objects not a part of awareness itself. This was obscured by Yates's

claim that we are "always and only" aware of products of our mental processes ("constructs"). I begin with an episode described not in Yates's terms.

Suppose you mistake for another person (B) someone who is walking up ahead (A). To catch up with A, you walk more quickly. You begin to prepare a greeting and conversation just as though A were the person you take A to be. In making these preparations you think of person A as person B, and you think about person B rather than person A. For example, you think that this part of town is a surprising place to find B walking; B must be just passing through. Also, you think of how B normally behaves toward you, your latest conversation together, and B's recent accomplishments, which you plan to mention. Surely, conscious thoughts about B are part and parcel of mistaking A for B in this situation. Without current thought awarenesses of B, you could not be in the process of mistaking A for B. Of course, throughout the episode, you are at no point perceiving B. And no matter whom you take A for, you see A and not the other person; to see person A, you do not have to see person A as person A. (For Yates, in contrast, whom you see depends on what you "construct"; more accurately, in his view, you see your "construct.") Still, though you do not see B, you see A as B and think about B as you walk faster. You have been expecting to see B's face at the moment when you are shocked by A's face. B must be the object of some of your awarenesses in this example.

Analogously, if you mistake an "object" for part of your surroundings, as Yates claimed we all systematically do, you must have thoughts about your physical surroundings, particularly their including your "object." If you mistake your "object" for a specific part of the external world, you must have thoughts about that part of the world. For example, you cannot mistake the "object" of your awareness for the desk at which you are now working without having thoughts about the desk itself.

Third objection: A subject distinguishes an ambiguous figure from how he or she is aware of it. Consider this example: an ambiguous figure that an experimental subject sees first one way, then another. Yates would say the subject is aware successively of different "objects," mistaking them for the identical stimulus figure. With regard to visually perceiving a Necker cube, he wrote of the "perception of alternative interpretations" one after another. And regarding ambiguous figures in general, Yates (1985) stated, "contradictory objects successively arise from a single stimulus" (p. 275). Now, if the experimenter later interviews the subject, the subject will describe the ambiguous figure as remaining the same from before to after the change in how it was perceived. The subject surely is thinking of the one ambiguous figure, not merely of the two different "objects" that purportedly correspond to it. The subject's description will be consistent with my view of what took place: different visual awarenesses, with different contents and one and the same object. As we are per-

ceiving any environmental object, our perceptual content will vary over time. First, we see the object one way, then another way, and so on. The following statement should be corrected by replacing its last word with *contents*: "A single circular shape may be seen as the 15th letter of the alphabet or as the null element of arithmetic, two very different objects" (Yates, 1985, p. 279). An experimental subject looks at a screen and sees a circular shape. Depending on instructions, the subject may see the shape as the letter O or as the digit zero. Seeing the shape one way produces different behavior from seeing it another way. But the subject's awarenesses are not directed to different stimulus objects. It remains the figure on the screen that the subject is visually aware of, whatever he or she takes it for.

Fourth objection: Why can nonconscious thoughts be about actual things while awarenesses must be about "constructs"? Awareness strictly of "objects" would be a deficient cognitive function relative to the nonconscious mental processes that Yates postulated as creating those "objects." Some of these nonconscious processes involve thoughts that, when true, have as their object a physical object, event, or state of affairs in the causal chain that produces them. Yates wrote of the causally mediating processes "between sensation and awareness" as representational, and as involving "a model of the world." They were said to make sense of sensory activity in terms of hypothesized environmental and bodily causes. For awareness, an "object" is created to embody a certain nonconscious thought or hypothesis about the physical environment. These nonconscious thoughts do not themselves, in turn, require "objects." Of course, no infinite regress was intended; the intentional objects of such nonconscious thoughts are not outcomes of further, distinct nonconscious thought processes that provide them with "objects." Somehow. Yates's nonconscious thoughts are about the external world, not about an immanent simulacrum. Why then must awareness be conceived as inwardly turned? What is different about awareness that requires it to be exclusively about those immanent "objects"?

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