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# The Sciousness Hypothesis — Part II

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The Sciousness Hypothesis holds that how we know our mental-occurrence instances does not include our having immediate awareness of them. Rather, we take notice of our behaviors or bodily reactions and infer mental-occurrence instances that would explain them. In The Principles, James left it an open question whether the Sciousness Hypothesis is true, although he proceeded on the conviction that one's mental life consists exclusively of mental-occurrence instances of which one has (or could have had) immediate awareness. Nevertheless, James was tempted by the Sciousness Hypothesis; and he adopted the kind of account of inner awareness favored among present-day psychologists of consciousness: to the effect that awareness of a mental-occurrence instance does not take place from within its phenomenological structure, always from a certain distance, by means of a distinct mental-occurrence instance. This means that the immediacy of inner awareness can only be a temporal and causal immediacy, not the kind we seem actually to have, whereby we consciously participate in the occurrence of a mental state. The present article, which is published in two separate though continuous parts, clarifies and elaborates the Sciousness Hypothesis, and critically discusses it and the kind of account of inner awareness that seems to be closest to it.

## Sciousness Pure and Simple

Notwithstanding how it may seem to you firsthand, the Sciousness Hypothesis holds that it is delusional for you to believe that any durational component of your stream of consciousness has as an immediate object of it the selfsame component or any other component of the stream. Whereas every durational component of your stream of consciousness is an awareness of something (either actual or merely apparent), it is delusional for you to think that the stream contains any "feeling of . . . subjectivity as such, of thought become 'its own object'" (James, 1890/1950, p. 305). Thus, the Sciousness Hypothesis does not countenance even the dubious kind of account of inner awareness that appendage theorists proffer and that is most akin to the Sciousness Hypothesis (Natsoulas, 1993c).

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Rather, the Sciousness Hypothesis denies that we have any immediate awareness at all of any of our mental-occurrence instances (Natsoulas, 1996). The Sciousness Hypothesis can be seen as a challenge to the great majority of psychologists and others who explicitly or implicitly hold either (a) that we have a completely unmediated, intrinsic awareness of some or all of our mental-occurrence instances or (b) that our special, personal access to our mental-occurrence instances consists of a corresponding appendage to each of them, something that is sometimes added on to their own occurrence.

According to appendage theory, an immediate awareness of any mental-occurrence instance is accomplished by a separate mental-occurrence instance that is cognitively directed on the first mental-occurrence instance. An appendage theorist will likely claim that the kind of appendage that he or she proffers to explain inner awareness is exactly what is needed to explain what, in the above quotation, James is referring to as the feeling of subjectivity as such, of thought become its own object. I argue here — in this, the second part of an article published in two parts — that because of an essential similarity between appendage theory of inner awareness and the Sciousness Hypothesis, appendage theory too, although it is not as dismissive, fails to account for that which James was referring to.

As is detailed in Part I of the present article (Natsoulas, 1996), James (1890/1950) seems to be briefly tempted by the Sciousness Hypothesis. But he adopts instead, without argument, what he recognizes to be the common conviction that we do indeed have immediate awareness of our own mental-occurrence instances. However, James advocates an appendage theory of this inner awareness, which is hardly commonsensical and has affinity to the Sciousness Hypothesis (see section titled An Appendage Account of Inner Awareness below).

When we have, for example, a visual perceptual experience of a tree in the garden, we often seem to ourselves that, in addition to being aware of the tree, we also have immediate awareness of the visual experience that we are having in seeing the tree. According to the Sciousness Hypothesis, we cannot have such inner awareness; the stream of perceptual experience, as well as the stream of consciousness generally, contains only completely outwardly directed components, such as visual experiences of a tree in the garden, and such as thoughts about the tree that result causally from having visual experience of the tree. It is in this sense, as we have seen in Part I, that the so-called stream of consciousness is held by the Sciousness Hypothesis to consist throughout exclusively of instances of sciousness pure and simple.

Of course, according to the Sciousness Hypothesis, we can have thoughts about our stream of consciousness or about one or more of its durational components. However, such thoughts too are supposed to be outwardly directed since they are outcomes of inferential processes having their basis in

what we observe or hear or read. Compare these inferential thoughts, about components of our own stream of consciousness, with the thoughts that we have regarding other people's mental-occurrence instances. According to the Sciousness Hypothesis, both kinds of thoughts are outwardly directed in the same sense.

#### Effects of Attempted Introspection

The Sciousness Hypothesis does not deny that we sometimes try to introspect. Some people make many more such attempts than others do; they are more introspective, as we say. Moreover, an effort to introspect is not necessarily inefficacious. The Sciousness Hypothesis does not deny that an effort to introspect can alter the contents of our mental life.

For example, trying to introspect our visual experiences or thoughts that take place when we are perceiving a tree in the garden may affect: (a) what about the tree we take notice of — perhaps we become aware of a larger number of the tree's many properties than we were aware of before we made the attempt to introspect; (b) the number and kind of thoughts that we have about the tree — perhaps we begin to think of the properties of the tree as subjective, as properties of our own mind that are being projected mentally and automatically onto the tree by the perceptual system at work; and (c) what we take notice of in our own perceptual behavior and bodily reactions — perhaps we now attend more closely to ourselves than we do to the environment, our desire to introspect having made us more self-conscious in the ordinary sense.

However hard we may try, we cannot apprehend directly what is going on in our own mind while we are perceiving a tree in the garden, or at any other time, or under any circumstances. It is no good staring more intently at the tree; this brings us no closer to apprehending the visual experiences that we are having than does looking at the tree inattentively, so that we have only the vaguest, general experiences of it.

To continue expressing the Sciousness Hypothesis, let me add the following. If we are having thoughts about the tree at the time that we are perceiving the tree, we may know about such thoughts from the covert or overt behaviors that our perceptual experiences produce in us, such as our saying to ourself, or aloud, that someone has taken great pains with the geometric placement of the trees in the garden.

Of course, this would be an example of what I called earlier a stimulational means of knowing about our thoughts (see A Black Box in Part I, the subsection titled Objection). And it would be considered a strictly inferential means of knowing about the thoughts — unless a theorist identifies, as the radical behaviorists in effect do, the thoughts involved with certain

behaviors that they produce. Would that means of knowing be "strictly" inferential, as I just stated? That is, would the inferential process not involve any inner awareness, even of our perceptual experience of our behavior? There will be comment pertaining to this point later in the present article (see also Natsoulas [1993b]).

#### Doing Justice to the Sciousness Hypothesis

- 1. Although that alternative understanding of our relation to our own mental states which is the Sciousness Hypothesis amounts to a denial of what many psychologists call "introspective access," it should be made clear that the Hypothesis is not necessarily a denial of the existence of the mental. It is not a necessary feature of the Hypothesis that what is commonly believed to be mental and nonphysical is actually a physiological event that has nothing mental about it. However, this is not to say that holding the latter view is not positively correlated with advocacy of the Sciousness Hypothesis.
- 2. Nor need the Sciousness Hypothesis deny the existence within us of a stream of mental-occurrence instances that is very much like James's stream of consciousness, except for the absence from the stream of a type of component that is a manifestation of a certain important ability, namely, the ability to have immediate awareness of our mental-occurrence instances.
- 3. Therefore, there is a certain erroneous way to understand the quotation near the start of this main section, a way that fails to do justice to the Sciousness Hypothesis. When James rules out, on behalf of the Sciousness Hypothesis, the existence of any "feeling of subjectivity," he is not ruling out the hypothesis that the elements of the stream of mental life are feelings. The Sciousness Hypothesis need not treat these elements as though they are purely cognitive, or instances of sensationless and imageless awareness. As James explains, it is a certain *category* of "feeling" that is absent from the stream according to the Sciousness Hypothesis, namely the kind of "feeling" that constitutes immediate awareness of a component of the stream.
- 4. As a help in grasping the Sciousness Hypothesis, one can imagine a still more radical view than the Hypothesis is (cf. Bridgeman, 1990; White, 1986). A more radical view would hold that none of the states, events, or processes occurring internally to an individual can literally be about anything, can literally possess the property of intentionality, can literally be an awareness of something. Such a view would be far more extreme than the Sciousness Hypothesis. The Sciousness Hypothesis rules out neither affective nor cognitive mental happenings.
- 5. To these happenings, moreover, an advocate of the Sciousness Hypothesis may give important explanatory roles. The Sciousness Hypothesis only rules out one's having any immediate awareness of these

happenings. They may nevertheless contribute to bringing particular behaviors into existence, but one could not know about their contribution in this regard (or in any regard) except in the way that other people can know about it.

#### Instances of Sciousness and Instances of Con-sciousness

On the alternative hypothesis to James's (1890/1950) own, the stream consists entirely of one instance of "sciousness" followed by another, followed by another, and so on, rather than including any instances at all of "consciousness" along the way. James explains that the prefix con serves to describe the stream of consciousness as being reflexive, in addition to being directed outward, beyond itself. (Etymologically, however, the prefix's original purpose was to qualify the knowing, or sciousness, involved as being joint and mutual between two or more people [Lewis, 1967].)

Thus, I take it that James means (a) any particular instance of "sciousness" would take place without there being any immediate awareness of any of its properties or even of its occurrence, and (b) any particular mental-occurrence instance that is, in contrast, a "con-sciousness" would be an object of immediate awareness; that is, at least something or other about any instance of "con-sciousness" would be taken notice of directly.

James would seem to conceive of the stream of consciousness as being comprised both of instances of sciousness and of instances of con-sciousness. I include instances of sciousness in my interpretation of James's view of the stream in order to forestall an infinite regress that can arise as a result of James's account of how we are aware firsthand of our own mental-occurrence instances (see An Appendage Account of Inner Awareness below).

As I shall go into soon, we are supposed to be aware of our mental-occurrence instances by means of a subsequent component of the stream, not by the mere occurrence of that particular mental-occurrence instance itself of which we are aware. In James's view, no mental-occurrence instance is "self-intimating" (Ryle, 1949); as I believe that some mental-occurrences are, namely all of those mental-occurrence instances that are conscious<sub>4</sub>. (See Natsoulas [1983] on the concept of consciousness<sub>4</sub>, and Natsoulas [1993a] on intrinsic, or self-intimational, theories of consciousness<sub>4</sub>.)

I should emphasize that to hold that there are self-intimating mental-occurrence instances, as I do, is not necessarily to hold that all mental-occurrence instances are self-intimating. It is completely consistent to accept the existence of both the self-intimational kind of mental-occurrence instance and the nonconscious kind of mental-occurrence instance (Smith, 1989). Grounds for belief in nonconscious mental-occurrence instances are sometimes used to make objections to the possibility of self-intimation. However,

no reason is typically provided for the assumption that, if some of them do, all mental-occurrence instances must have a self-intimational phenomenological structure.

#### Against Self-Intimation

1. The Response Requirement. With regard to the issue of self-intimation, James is clearly on the side, I believe, of most present-day psychologists who have something to say about inner awareness. A present-day psychologist is likely to be critical of an hypothesis of self-intimation with respect to how we know any part of our own minds. Influenced by the stimulus-response formula, a psychologist will probably insist that whatever is mentally apprehended must be a cause of the mental apprehension of it. A mental- occurrence instance must be "responded to" at some level (i.e., overtly, covertly, or incipiently) in order for it to be known directly; or else it may be known indirectly by "responding to" something else that is associated with it. Even Skinner, who claims not to be an S-R psychologist, and who argues that discriminative stimuli constitute not the trigger but the occasion for particular operant behaviors, consistently requires that anything that anyone can know must be "responded to" in order to be known. This includes one's own behavior. However finely tuned to the environment particular behavioral occurrences may be, the organism would not know about the behavior unless the organism "responded to" the behavior.

The idea of "responding to" something gets a great deal of use in contemporary psychology, although the corresponding technical concept may be a very vague one. Psychologists use various versions of this idea that diverge to a greater or lesser degree from the commonsense notion and can be unstable in their application. In ordinary language, for someone to "respond to" something requires that one have awareness of the something that one is "responding to," as well as awareness of, in the process of making it, the response that one is making. Psychologists usually require far less to apply their corresponding technical notion.

2. Alienation from Experience. It is somewhat less clear why James, too, insists that the knowing and the known can never be identical — even in the case when it is one's own experience that one knows about. Why can we not know of an experience in having it all on its own? On the face of it, James's bifurcation would mean that we are "alienated" from all of our experiences, that we know them only from the outside, never from within their own structure, as part of their very occurrence.

Here too, James contrasts the point of view of psychology as a natural science and more metaphysical approaches. James seems to believe that it is somehow empirical for him to hold that "mind knowing" and "thing known"

are always distinct existences. This is an essential assumption that all of science makes, because science seeks to learn about the world that exists externally to the mind itself. "Some sort of *signal* must be given by the thing to the mind's brain, or the knowing will not occur" (James, 1890/1950, p. 218).

James generalizes this point to include the mind's own activity without exception, notwithstanding his holding: that the basic durational components of the stream of consciousness are produced by the total brain process; they are brought into existence piece by successive piece by a purely physiological process that is truly continuous, whereas the stream of consciousness consists of a succession of temporally adjacent accretions (Natsoulas, 1992–1993).

3. Reply to James. It would seem to follow that, already, without receiving a "signal" from a particular mental-occurrence instance that the total brain process has produced, the total brain process "knows" all that it can "know" about that mental-occurrence instance. Any effect that the mental-occurrence instance may have on the total brain process — indeed, it can have certain such effects (of hindering or furthering the course of the brain process) according to James's (1890/1950) mind-brain dualist interactionism — cannot render the total brain process more "informed" regarding the occurrence or character of the mental-occurrence instance that it just produced.

The preceding paragraph is a little overstated but very close to the implications of James's (1890/1950) understanding of the relation between consciousness and the brain. There is one qualification that I would add. James attributes certain features to the stream of consciousness that have no corresponding properties in the total brain process. Accordingly, James rejects the automaton theory, which holds that all behavior can be explained in terms of the functioning of the brain. This means that certain features of consciousness that can affect behavior do not have exact counterpart properties in the total brain process. I mean properties of the neurophysiological process that produced those features of consciousness and can be used to explain the behavior in place of the stream of consciousness. Nevertheless, much of what takes place in the stream of consciousness corresponds closely to its causes in the total brain process. The total brain process can be metaphorically said to "know" to a substantial degree what the stream of consciousness contains in having produced it.

Therefore, I ask: Why cannot the brain process produce, as well, mental-occurrence instances that are self-intimating, that give some degree of knowledge each of them of itself? After all, the brain produces mental-occurrence instances that are awarenesses of things and occurrences distant from the mind; as James states, knowing is the most mysterious thing in the world. Therefore, why cannot a mental-occurrence instance be about both something independent of itself and about itself as well, since it can be about

more than one entity or occurrence external to it? According to James (1890/1950), a basic durational component of the stream can be extremely complex and simultaneously involve many objects beyond itself that it is about, including one's own "bodily position, attitude, condition" (p. 241).

4. James. Nevertheless, James states,

Comte is quite right in laying stress on the fact that a feeling, to be named, judged, or perceived, must be already past. No subjective mental state, whilst present, is its own object; its object is always something else. There are, it is true, cases in which we appear to be naming our present feeling, and so to be experiencing and observing the same inner fact at a single stroke, as when we say "I feel tired," "I am angry," etc. But these are illusory and a little attention unmasks the illusion. (p. 190)

Thus, on James's account, the difference between instances of sciousness and instances of con-sciousness is not intrinsic to the particular mental-occurrence instance that is categorizable under the one heading or the other. The property of con-sciousness, as it were, is a relational property between basic durational components of the stream. A mental-occurrence instance that firsthand seems to be an instance of con-sciousness is so, according to James, because the mental-occurrence instance is followed, shortly upon its taking place, by another mental-occurrence instance that has the first mental-occurrence instance as its object.

In contrast, a mental-occurrence instance that is an instance of sciousness pure and simple does not seem to the individual in any way at all; because an instance of sciousness, by definition, is not an object of immediate awareness, lacking as it does that necessary accompaniment in the form of which, according to James, there would be immediate awareness of it.

Of course, the latter sentence is not meant to exclude the fact that one might *conceive* of a particular instance of sciousness, of which one had no immediate awareness. Thus, an instance of sciousness belonging to a particular individual *can* seem to him or her in some way. But a different sense of "seem" is at work in this case. This sense applies to anything that anyone happens occurrently to conceive of.

## Avoiding a Regress

Now, if the further, necessary component is also itself an instance of consciousness, then there would perforce take place (on the hypothesis that the stream consists only of instances of con-sciousness) a still further component of the stream that is an awareness of it in turn, and so on. All these awarenesses could not occur simultaneously, since it is James's view that, normally, only one mental-occurrence instance takes place in an individual at a time. (The exceptions, which are rare, involve a second stream of consciousness

brought into existence by a total brain process that has become divided into two discrete, internally unified processes.) Thus, all instances of con-sciousness would be the occasion for a large number of awarenesses of previous awarenesses, exhausting the stream's opportunities for mental-occurrence instances that are about something else, beyond the stream itself. The regress of inner awareness has to stop from time to time in order for the stream to get on with giving awareness of external things and occurrences. Recall one of James's (1890/1950) five important characteristics of the stream: "It always appears to deal with objects independent of itself" (p. 225).

A compatible and reasonable way to avoid the regress is for James to allow that the stream does include instances of sciousness. Indeed, as James (1890/1950) states, "Thought may, but need not, in knowing, discriminate between its objects and itself" (p. 275). The sciousness components of the stream would all be such as might have been instances of con-sciousness if only an appropriate subsequent component of the stream had occurred along with each of them.

This addendum to James's account, assuming that such an addendum is actually needed, would serve to preserve the spirit of James's rejection of unconscious mental states; he spends ten pages giving objections to various proofs of the existence of unconscious mental states (James, 1890/1950, pp. 164–175). Although instances of sciousness would be included in the stream, no component of the stream would be such as it could not be an object of immediate awareness. It would just so happen that, on a particular occasion, some of the components of the stream were not accompanied by other components of the stream that were directed on those components.

And there would be conditions that prevented the occurrence of the necessary introspective component, and other conditions that made its occurrence highly likely. For example, I am thinking here, on the one hand, of forms of distraction in which attention is strongly focussed on something external to the stream and, on the other hand, of instructions or self-instructions to take note of the contents of one's stream.

However, there would be nothing intrinsic about any basic durational component of the stream of consciousness that would rule out this component as a potential object of inner awareness. That is, none of the basic durational components of the stream of consciousness would be in principle nonconscious.

## Visual Blindness and Introspective Blindness

## Introspective Blindness

If the alternative, radical hypothesis concerning the stream of mental life were true, that is, if the stream contained no instances of con-sciousness at

all, then we would be, with respect to all our mental states, "introspectively blind" (Shoemaker, 1993). I would put it this way: by definition, a creature is introspectively blind with respect to certain sorts of mental states if (a) it has such states, and may even be able to conceive of them and of itself as having them, but (b) this creature is incapable of having immediate awareness of any of these states. An introspectively blind creature might have a great deal of knowledge about its mental states, but it would have acquired none of this knowledge as a result of direct acquaintance with its mental states, since it lacks that capacity by definition.

My definition of an introspectively blind creature may not be internally consistent (cf. *Empirical Impossibility* below). I have attributed to such a creature the possibility of knowledge concerning its (nonconscious) mental life. However, it does not seem to me that it could acquire such knowledge, because of its lack of immediate awareness. For example, it could not make use of any of its perceptual experiences to acquire knowledge. How could it learn anything about the world (including its own mental life) from experiences of which it has no immediate awareness? The answer "By inference" cannot serve. Whatever the proposed inferential basis might be, we must have immediate awareness of our awareness of it in order to draw the necessary inference (see *Three Proposals* in Part I).

## Congenitally Blind Scientist of Visual Perception

However, a congenitally blind perception psychologist might know a very great deal about how the normal human visual system functions, notwithstanding this psychologist's inability to have immediate awareness of any instance of the visual perceptual experiences (belonging the blind psychologist's experimental subjects) that he or she studies.

In recent discussions of the mind-body problem, to the extent of the possible knowledge of visual perception that a congenitally blind scientist can have has been debated. However, all parties to the discussion agree that a congenitally blind scientist could know a very great deal about visual perception. The disagreement focuses on what the congenitally blind scientist cannot know so long as he or she remains completely blind. It is argued by some that, lacking visual experience and, therefore, any immediate awareness of it, the congenitally blind scientist cannot possibly know all there is to know about the experiential aspect of visual perception.

Others argue that the congenitally blind scientist can know all there is to know about both the process of visual perceiving and visual experience itself. Accordingly, the knowledge that one acquires by means of inner awareness can be acquired otherwise as well, that is, objectively, by procedures that do not require firsthand access to visual experience. The knowledge of visual

experience that is acquired by inner awareness is merely of "an abstract, hypothetic or conceptual" sort. The latter is James's (1890/1950, p. 304) phrase as he describes how, according to the Sciousness Hypothesis, one is aware of one's "'pure' Self," that is, of one's mental-occurrence instances. Although those who argue in favor of the congenitally blind scientist's potential for full knowledge are not Sciousness theorists, they are likely to be appendage theorists of inner awareness. The kind of immediate awareness of my own visual experience that I have, according to appendage theory, is no more intimate and revealing than if the properties of my visual experience were inferred.

#### Empirical Impossibility

Let me return briefly to a theme already touched on both in this part of the article and in Part I. I have been speaking of complete visual blindness, not of introspective blindness, and neither of these kinds of blindness implies the other. There is another important difference between the two kinds of blindness, in my view.

Whereas a completely blind scientist of visual perception is certainly conceivable and empirically possible, a completely introspectively blind scientist is not. The existence of a completely introspectively blind scientist would mean that someone could practice science without ever having immediate awareness of any of his or her thoughts, perceptual experiences, intentions, desires, and so on. This should seem obviously impossible.

The pursuit of science while the scientist remains completely free of consciousness<sub>4</sub> is just as impossible as a science carried out in the absence of consciousness<sub>3</sub>. Hard-headed psychologists who, from their scientific pulpits, inveigh against consciousness could not possibly do science without being conscious, whether we understand the latter phrase to refer to their having occurrent awareness of things in general or to their having immediate awareness of their mental-occurrence instances in particular. How could, for one thing, an introspectively blind scientist know that he or she has achieved a certain particular result in an experiment if the scientist, though perceptually experiencing the result, has no immediate awareness of doing so (cf. *Three Proposals* in Part I of present article)?

It might be replied, for example, that someone could tell the introspectively blind scientist about the outcome of the experiment, just as one would tell a visually blind scientist who cannot have visual experience or, as it may happen in some experimental cases, any other kind of perceptual experience of the outcome. However, although an introspectively blind scientist would have auditory experience of the words spoken to him or her, the introspectively blind scientist could not, by definition, have immediate awareness of

this auditory experience. Consequently, the introspectively blind scientist would not even know that someone had spoken to him or her. The same applies to any other way by which it might be thought an introspectively blind scientist could keep up with the results of his or her experiments.

#### "Something Objective"

In accordance with James's rendition of the Sciousness Hypothesis, all that a completely introspectively blind creature could experience would be "strictly considered *objective*" and any and all of the creature's experiences could be known by the creature only "in subsequent reflection" (James, 1890/1950, p. 304). That is, all mental-occurrence instances had by a completely introspectively blind creature would be of something objective as opposed to something subjective.

The reference to "something objective" should not be allowed to mislead. I do not mean to suggest that all the experiences of such a creature would be veridical. For example, the creature might well hallucinate, suffer perceptual illusions, and have false thoughts. A fire-breathing dragon is, in the present sense, "something objective." My reference to "something objective" is by way of saying something negative: that none of the creature's mental-occurrence instances would be experiences of its experiences; and, thus, at no point would the creature have immediate awareness of its experiences, thus of anything subjective.

Insofar as the creature did have occurrent awareness of one of its mental-occurrence instances, such awareness would consist of one or more thoughts about the latter, thoughts that are much like the thoughts that the creature might have about various parts of its environment including, importantly for the present argument, thoughts about the mental-occurrence instances of other individuals.

## The Feeling Aspect

My reference to "thoughts" here may also be misleading. Let us suppose, just as James argues, that no mental-occurrence instance is ever purely a thought: in the sense of its not being a feeling as well, of its not including in its structure an aspect of feeling too, in addition to its cognitive content. As we would now say, all mental-occurrence instances have qualitative properties, a qualitative character, or qualitative content. Thus, for example, visual experiences are "feelings" as well as being cognitions, not because they produce feelings, which they often do, but simply because they are experiences. In fact, according to James, all mental-occurrence instances have an intrinsically qualitative phenomenological structure.

James's conception of all mental-occurrence instances as being both cognitive and qualitative contrasts, for example, with Sigmund Freud's conception of the mental. Freud (1915/1957) wrote, "Thought-processes, i.e., those acts of cathexis which are comparatively remote from perception, are in themselves without quality and unconscious" (p. 221). For Freud, there are, of course, conscious thoughts as well as nonconscious ones, but only the conscious ones (as well as all other conscious mental-occurrence instances) are each of them both cognitive and qualitative occurrences.

Consistently with James's view of the basic durational components of the stream of consciousness — and, thus, of all mental life — the introspectively blind creature's mental-occurrence instances would each possess, just as all of ours do, a dual nature: each of them would be both cognitive and peculiarly "tinged" with feeling that is intrinsic to the structure of each of them (James, 1890/1950, p. 478). And so, as regards the occurrent awarenesses that this creature has of other components of its stream of sciousness, the creature would undergo these awarenesses "feelingly" in the sense that I have just explained.

However, since the creature, being introspectively blind, would lack all immediate awareness by definition, the occurrent awarenesses just mentioned, even of the feeling aspect of any of the creature's mental-occurrence instances, could only be apprehensions from a distance, so to speak, or in the mental-occurrence's "absence." However "feelingful" these occurrent awarenesses might be, they could only be about the feeling aspect of the mental-occurrence instance that is their respective object; they could not be a firsthand acquaintance with that aspect. They could not be a kind of conscious participation in the mental-occurrence instance.

In other words, an introspectively blind creature, since it lacks all inner awareness, could have feelings and corresponding awarnesses that are about its feelings, but it could never have an experience of feeling. The creature could correctly conceive of itself as having particular feelings at particular times, but it could not have direct evidence of such an occurrence in any case.

It would not matter that the creature's occurrent awarenesses of feeling were themselves instances of feeling as well as being cognitive occurrences. And it would not matter if the feeling aspect belonging to the occurrent awareness in question resembled the feeling aspect of the mental object of that occurrent awareness. For those instances of feeling too, *ex hypothesi*, could not be objects of immediate awareness. Their being literal parts of occurrent awarenesses would not force a qualification of the hypothesis of a completely introspectively blind creature; as though such a creature were in principle impossible, or a self-contradictory idea, because an occurrent awarenesses of feeling is said itself to involve feeling. It could be held either (a) that, on a self-intimational account (e.g., Smith, 1989), an occurrent awarenesses

ness need not give awareness of its own feeling aspect, some do and some do not, or (b) that, on James's "appendage" account of inner awareness (see next section), no awareness is ever an awareness of anything about itself.

#### An Appendage Account of Inner Awareness

#### A Thought Regarding Another Thought

I argue that to have a mere thought about an experience is not to have immediate awareness of the experience — no matter (a) how closely in time to the experience the thought that is about it occurs, and no matter (b) whether the thought occurs noninferentially, that is, in the absence of an inferential process that leads to having the thought as an outcome of reasoning. A mere thought about another thought (or about any experience) cannot be an immediate awareness of the latter thought (or experience), or else we would be having immediate awareness of other people's thoughts.

With this James certainly would agree. This can be seen from his example of Peter and Paul, who both succumb to sleep while they are conversing. Each of them, upon awakening, is able to selectively appropriate his own last thoughts before falling asleep, although he has knowledge of the other person's thoughts as well as of his own. Each has thoughts regarding the other's last thoughts before falling asleep, but Peter

remembers his own states, whilst he only conceives Paul's. Remembrance is like direct feeling; its object is suffused with a warmth and intimacy to which no object of mere conception ever attains. This quality of warmth and intimacy and immediacy is what Peter's present thought also possesses for itself. (James, 1890/1950, p. 239)

There is more to immediate awareness of a mental-occurrence instance than having an occurrent awareness of it.

#### Distinct Existences

I have referred repeatedly to the immediate awareness that one has of some of one's mental-occurrence instances, and I have mentioned James's kind of account of this immediate awareness. James's account is a variety of what I have previously called appendage theory (Natsoulas, 1993c; Rosenthal, 1993). As I have already stated in the present article, any instance of immediate awareness requires, from James's perspective, a distinct component of the stream which has another, prior component of the stream for its object. The component that is the immediate awareness of the other, prior component is brought into existence, according to James, by a later phase of the total brain process that has already brought about the earlier component

(among much else). The earlier component may have some effect on the course of the total brain process, furthering the present direction of brain activity or hindering its progress in that direction, but that component (or, for that matter, any component of the stream) exercises no direct effect on other components of the stream; that is, it has no effect that is unmediated by the brain process, in James's (1890/1950) view.

According to James's dualist interactionism, there is direct interaction between the brain and the stream, notwithstanding their radically different natures: "The relations of a mind to its own brain are of a unique and utterly mysterious sort" (p. 216). But the total brain process brings the stream of consciousness into existence piece by successive piece, basic durational component by basic durational component; rather than each component of the stream transforming itself into the next component, as would be more consistent with the metaphor of a stream of mental life that expands continuously along the dimension of time (Natsoulas, 1992–1993).

I want to emphasize the distinct existence, according to James's account of inner awareness, of each one of those occurrent awarenesses that are supposed to constitute an inner awareness, its distinct existence from that of which it is an immediate awareness. Again, the awareness and its object do not have even one direct causal connection to each other, that is, a connection unmediated by the total brain process, which produces the object of awareness and the awareness of the object in turn.

Accordingly, one can imagine a case in which, somehow, the brain process produces an inner awareness as though of a certain mental-occurrence instance although the brain process does not, in this case, produce the mental-occurrence instance itself — as it normally does, according to James's account, when it produces, subsequently, an immediate awareness of a mental-occurrence instance. For example, carefully focussed, electrical microstimulation of a locus in the brain might have this effect, producing immediate awareness of one or more mental-occurrence instances that in fact had not occurred. Thus there would take place a kind of "hallucinatory" inner awareness.

Needless to add, what determines whether the first of these two components qualifies as an instance of con-sciousness (or, instead of that, as an instance of sciousness) is whether the total brain process produces the second of the two components, which is supposed to be the immediate awareness of the first component.

## The Immediacy of Immediate Awareness

Now, how is the latter so? How can the second component, as described, be an immediate awareness of the first component? As I have indicated, con-

trary to other theorists, I do not believe that it is possible for immediate awareness to work in this way. Unless, of course, we change the meaning of *immediate awareness*, as some theorists are willing if not eager to do. That is, unless our concept of immediate awareness is revised to include cases in which the second component is no more than a thought about the first component, a thought about it that an individual might have notwithstanding the first component's not taking place in that individual.

#### A Different Issue

However, immediacy is the question that I am raising here, not simply the question of how the second component can be an awareness of the first component. I elsewhere raise the latter question against all appendage theory of immediate awareness (Natsoulas, 1993c), to which the appendage theorist Rosenthal (1993) provides a reply. I argue there that appendage theory does not explain how a subsequent awareness finds its target, which is the earlier mental-occurrence instance, that is, how a distinct awareness can be of a certain mental-occurrence instance specifically.

Rosenthal (1993) responds (a) that, in effect, I am merely calling attention to the general problem of intentionality, and (b) he and other appendage theorists of inner awareness need not address the problem of intentionality in their capacity as appendage theorists. But this strikes me as a decidedly odd position to adopt for at least two reasons.

- 1. Intrinsic (i.e., self-intimational) theory of immediate awareness, which is a major competitor of appendage theory, has the advantage of including immediate awareness of a mental-occurrence instance in the latter's own structure (e.g., Smith, 1989). Thus, intrinsic theory does not have to postpone treatment of the problem that I am raising. This fact should put appendage theorists on the spot. Possibly, appendage theorists cannot explain how a mental-occurrence instance that is supposed to be the immediate awareness of another mental-occurrence instance succeeds in finding its target without appendage theorists' introducing self-intimational awareness in some form.
- 2. A perception theorist who refused to explain how perceptual experiences find their target in the environment or body would be seen as failing to develop a perception theory. It is curious that a theorist of consciousness would reject the strongly analogous responsibility on the grounds that there exists a more general problem of intentionality. If one cannot explain at present how a thought or other appendage can be an inner awareness, then perhaps one ought to look elsewhere than appendage theory for an account of inner awareness, rather than continue to have faith that appendage theory will turn out to be consistent with the ultimate explanation of intentionality.

## The Immediacy of Appendage Theory

I grant, of course, that we can have distinct awarenesses of components of our own (or of another person's) stream of consciousness, but note the absence of the word *immediate* in my latter clause. In other words, how is it possible for us to experience an experience simply by having a second experience that is about the first experience?

By experiencing an experience, I do not mean, of course, simply the having of a certain experience. One may have experiences in the complete absence of any kind of awareness of them (contrary, for example, to Brentano, 1911/1973).

However, one cannot experience the having of an experience in the absence of being immediately aware of having it. The question again: How does this immediate awareness take place?

On the face of it, it does not seem that a separate experience can be the locus of having immediate awareness of an experience, or the experiencing of an experience. The only kinds of immediacy vis-à-vis an experience that a separate experience can deliver, so to speak, are temporal and causal: (a) The separate experience can occur immediately after the experience that is its object; there might be no time-gap between them in the stream of consciousness; they might be flatly adjacent to each other in time. (b) The separate experience can occur "directly": meaning not as a product of inferential processes, and without the causal mediation of other experiences.

But neither of these kinds of immediacy, alone or together, would qualify as the experiencing of an experience — as opposed to merely the having of a thought about the experience. The separate, second experience might be a thought about the first experience and it might occur in temporal adjacency to the first experience in the same stream of consciousness. That such immediacy would not alter how one has the first experience can be seen by comparison with the case in which there is a delay in the occurrence of the second experience. Whether a thought about an experience occurs immediately after the experience occurs or, instead, takes place later on would seem not to make any difference to how one has the experience itself; one would not experience the experience simply because a thought about it occurred earlier rather than later after the experience (nor because the thought occurred at all). In both cases, one would have awareness of the experience. But I suggest that, firsthand, it would be as though the experience had not occurred unless one also experienced the experience, which is more than to have an awareness of it.

## The Immediacy of Pain Experience

I believe that the latter point will be readily appreciated if I use the example of a pain experience. Suppose that I have a pain and am aware of this pain

of mine in the same way that I am aware of the pains of other people. That is, suppose my awareness of my own pain is merely a thought or series of thoughts regarding the pain. It would not matter when this thought or these thoughts occurred, whether they occurred very near or far in time from my pain. In either case, it would be for me as though the pain had not occurred, since thoughts about it were all that were involved, *ex hypothesi*, in my having awareness of the pain. I had no immediate awareness of the pain experience.

Also, to have delusional thoughts to the effect that one is undergoing pain is neither to produce pain experiences or to experience one's having pain. And even if thoughts of a certain kind can actually produce pain experiences, it would only be for me as though I were having pain because I was having pain that I experienced, and not simply because I was having thoughts about the pain. If all that I have is a thought or series of thoughts about a pain, I have no immediate awareness of pain. Immediate awareness of pain requires having pain, because any immediate awareness of a pain is part and parcel of that pain experience.

One can have, of course, a strong conviction that someone else is in pain. It might be argued that the very same kind of conviction with respect to one-self typically occurs when one is in pain. That is, one has a pain experience along with a strong conviction to the effect that one is having that experience. And so, contrary to what I stated above, it would not be for me as though I were not having any pain if my pain and awareness of my pain were distinct existences. Instead, I would occurrently believe that I was having pain. So an objection to what I have stated might go.

However, it is a fact that we easily discriminate between (a) cases in which we are convinced that pain is going on although we cannot experience the having of the pain and (b) cases in which we can so experience. I am referring in the first place to cases of obvious pain, in which the evidence is such that everyone would agree that pain is going on in someone else. I am referring in the second place to cases in which the pain is one's own, for these are the only cases that qualify as pains that one experiences. As the strength of our conviction regarding someone else's being in pain increases, or as we acquire greater knowledge regarding the other's experience, there occurs no diminution in our ability to tell the difference between occurrences of pain that we experience and those we do not experience but have an awareness of in a different way. A strong conviction that a particular other individual is undergoing pain brings us no closer to experiencing the pain experience of the other individual, or any closer to giving us direct awareness of that experience. Nor does a conviction regarding one's own pain somehow amount to an immediate awareness of this pain — just because the conviction is strong, occurs closely in time to the pain, and comes into existence noninferentially.

It may be suggested that the latter, noninferential feature is key. Whereas we are aware of our own pain noninferentially, it may be suggested that we

cannot be aware of another's pain noninferentially. However, absence of inference cannot be all that there is to immediate awareness. Remembering one's own past pains also can occur without inference. From time to time, seemingly out of the blue, one has conscious<sub>4</sub> "retrowareness" of a past pain experience. The latter fact certainly does not mean we can be having immediate awareness of a past pain experience for as long as, without the aid of processes of inference, we can be remembering the pain experience.

If it is replied that only those instances of noninferential awareness of a pain that take place close in time to the pain qualify as immediate awarenesses of the pain, we are entitled to expect a persuasive answer to the following question. How does the temporal locus of what amounts to no more than an occurrent conviction succeed in elevating what is merely a thought to the status of an immediate awareness of the pain experience, an immediate awareness of the kind that, everyone agrees, we cannot have of another individual's pain experiences?

#### The Immediacy of Noninferential Awareness

The response may be forthcoming that this is all that immediate awareness amounts to. We speak of having immediate awareness of our experiences, implying that there is something more to it than having a noninferential awareness of a mental-occurrence instance that accompanies the particular mental-occurrence instance. However, there is no more to what actually happens, according to this answer, than the particular experiences we have and certain accompanying occurrent beliefs about those experiences, occurrent beliefs that simply come over us when those experiences occur (although we can make such occurrent beliefs more likely by adopting an introspective attitude).

These occurrent beliefs are like a presentiment that we might have of someone's looking over our shoulder as we write. That is, we do not have knowledge of the causes of those occurrent beliefs regarding our experiences that is any more intimate or direct than the knowledge that we acquire by having that presentiment occur in us. We have no acquaintance with our experiences that is of any greater intimacy or is any more first-hand than is our awareness of the experiences of others. In the case of other people, we might make reference to evidence bearing on the accuracy of our awareness of their experiences, something about their observable behavior for example. In the case of our own experiences, we might do the same. We might find something that vindicates or supports our occurrent belief concerning one or more of our experiences. But, more frequently, the occurrent belief about an experience comes over us without our knowing anything regarding what has transpired in the process of the

experience's occurring except for whatever it may be that the occurrent belief relevantly "asserts" about the experience.

However, in order for this theoretical position to be defensible, the theorist must consider illusory a fact that we know at least as well as anything else: our experiences have a kind of intrinsic quality that is characteristic of the kind of experience that each of them is. For example, in possessing a certain kind of intrinsic quality, all auditory experiences differ from all pain experiences, which possess a different kind of intrinsic quality (Puccetti and Dykes, 1978). This difference among categories of experience in quality, which we "feel" (James would say), would not be known to us if we had access to our own experiences that was basically the same as our access to other people's experiences, that is, if we knew our own experiences, too, in their "absence" and not in their "presence," that is, not in their own person.

We would know our own experiences merely in their "absence" if all that took place whenever we were said to have immediate awareness of them was that they occurred in us and were accompanied by certain thoughts about them, however specific these thoughts might be, even if these thoughts had reference to that distinctive quality. A congenitally blind person, for example, might have thoughts, upon listening to music, to the effect that visual quality, according to those who know, differs from the quality of this, the auditory experiences that he or she is experiencing now. This person's thoughts about visual quality would not give him or her immediate awareness of visual quality, as he or she has immediate awareness of auditory quality when experiencing auditory experiences. Just as we too would not, the congenitally blind person would not have immediate awareness of the auditory quality of his or her experiences if the person had thoughts about auditory quality but did not experience his or her auditory experiences, simply had them and thought about them in the way that he or she thinks about visual experiences. Again, I emphasize that the congenitally blind person might know a great deal about visual quality, and it would not matter how much he or she knew about it. The congenitally blind person could not have immediate awareness of visual experience because he or she could not have any visual experience.

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