

The Sciousness Hypothesis — Part I

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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, and proceeded in accordance with the conviction that one's stream of consciousness consists only of basic durational components of which one has (or could have had) immediate awareness. Nevertheless, James seems to have been tempted by the Sciousness Hypothesis. And he adopted an account of inner awareness that is popular among present-day psychologists of consciousness, to the effect that awareness of a mental-occurrence instance never takes 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 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 closest to it.

Instead, then, of the stream of thought being one of *con*-sciousness, "thinking its own existence along with whatever else it thinks" (as Ferrier says), it might be better called a stream of *Sciousness* pure and simple, thinking objects of some of which it makes what it calls a "Me," and only aware of its "pure" Self in an abstract, hypothetical or conceptual way.

(James, 1890/1950, p. 304)

The Context

More than a century after its publication, William James's *The Principles of Psychology* continues to be highly relevant to our present-day scientific understanding of consciousness. And, in this regard, "Chapter X. The Consciousness of Self" is no less pertinent than the well-known and, among

psychologists, justly celebrated “Chapter IX. The Stream of Thought” (which, in his abridgement, James [1892/1984] renamed “The Stream of Consciousness”). The present article — which is published in two separate parts — addresses a particular problem of consciousness, namely, the existence and character of “inner” or “immediate awareness.” The article draws on both monograph-length chapters that I just mentioned, as well as on other parts of James’s magnum opus, including “Chapter XV. The Perception of Time.”

Problem of Consciousness

For psychological science, there are problems of consciousness, not merely one such problem (Natsoulas, 1981); just as there are a number of problems of learning and memory that demand scientific attention and solution from psychologists. My particular concern here is with the kind of consciousness that I have been calling “consciousness₄,” after the fourth entry under *consciousness* that appears in *The Oxford English Dictionary* (the OED). With reference to the six main entries under the word in the OED, I have distinguished six categories of phenomena that are properly referred to when using *conscious* and *consciousness* (Natsoulas, 1983).

The main definition within the OED’s fourth entry states in full: “The state or faculty of being conscious, as a condition or concomitant of all thought, feeling and volition; ‘the recognition by the thinking subject of its own acts and affections’ (Hamilton).” The illustrative quotations that the fourth OED entry includes serve to make it clear that this explicit definition has reference to the *state or faculty of having immediate awareness of one’s mental-occurrence instances*. Those mental-occurrence instances that are objects of such inner awareness are the “conscious” ones, in the fourth OED sense, rather than being “nonconscious.”

The term “nonconscious” may be used to describe any mental-occurrence instance of which the individual does not have immediate awareness. Contrary to the OED’s above definition for the concept of consciousness₄, I do not hold that “all thought, feeling and volition” involves inner awareness in every instance of its occurrence. Later in the present article (see the main section titled *Instances of Sciousness and Instances of Con-sciousness* in Part II), I bring out that James’s account of the stream of consciousness, too, is best understood to allow for such variation, notwithstanding his strong opposition in *The Principles* to the existence of nonconscious mental-occurrence instances.

The problem of consciousness that I am concerned with in this article is the empirical problem of how the immediate awareness that we have of some of our mental-occurrence instances is accomplished. However, the angle from which I approach this problem is mainly by considering an hypothesis

that explicitly rejects the existence of such inner awareness; as well as by considering certain closely related hypotheses, which in effect reject inner awareness by reducing it to something else. To approach the problem of inner awareness in this negative way will cast light, I believe, on the kind of solution that the problem actually requires, rather than the kind that is rendered appealing by certain broad theoretical commitments.

A Certain Tension

It will be recalled that James (1890/1950) devotes Chapter IX to spelling out five important characteristics of the stream of consciousness, or the phenomenology of mental life. At the start of Chapter IX, James identifies the five characteristics as I quote just below.

I should point out, first, that James uses the word *thought*, as well as the word *feeling*, to refer to the basic durational components of the stream. As James mentions, he might have called these components “states of consciousness,” were this as efficient a form of address. Or, as Searle (1992) does, James might have called the basic durational components of the stream of consciousness “conscious states.” The two authors differ, however, in that for James (1890/1950) conscious states are not brain states. James is strongly tempted by materialism with regard to the relation of the mental and the physical, but he does not succumb. (Searle resists the same temptation by ascribing nonreducibly mental properties to states of the brain.) For James, the stream of consciousness is not a neurophysiological process, although it is “the total brain process” that is supposed to produce the stream of consciousness, and to bring mental life into existence piece by successive piece.

Here are James’s five characteristics of the total mental process, which he calls “thought going on” and which consists of the occurrence of one thought (feeling) followed by another, and so on, until a time-gap in the stream of consciousness intervenes, when mental life is very briefly or for a longer time extinguished.

- 1) Every thought tends to be part of a personal consciousness.
- 2) Within each personal consciousness thought is always changing.
- 3) Within each personal consciousness thought is sensibly continuous.
- 4) It always appears to deal with objects independent of itself.
- 5) It is interested in some parts of these objects to the exclusion of others, and welcomes or rejects — *chooses* from among them, in a word — all the while. (James, 1890/1950, p. 225)

Soon after James completes his famous discussion of these characteristics, which takes up the whole of Chapter IX, the sentence that I quote at the head of the present article appears in some speculative pages of Chapter X. The starting point and major focus of the present article is a radical hypothe-

sis that James, in these speculative pages, very briefly considers regarding how the stream of consciousness is related epistemically to itself, or how we have knowledge about our own mind.

However, already, in James's above list of characteristics of the stream, a certain tension can be discerned that underlies, I believe, James's passing speculation. There is tension between (a) the stream's stated property of dealing constantly with objects that are independent of itself and (b) the fact that each thought is said to be part of a personal consciousness. Every thought or feeling, every state of consciousness or conscious state, possesses the property of intentionality (as Brentano calls it) and has as its object something real or apparent beyond itself. This applies even to the most simple mental-occurrence instance. It too is an occurrent awareness of something or other. At the very beginning of Chapter IX, James (1890/1950) writes,

No one ever had a simple sensation by itself. Consciousness, from our natal day, is of a teeming multiplicity of objects and relations, and what we call simple sensations are results of discriminative attention, pushed often to a high degree. (p. 224).

And there is no other kind of state of consciousness, or basic durational component of the stream, that lacks a cognitive function entirely, that does not intrinsically possess the property of being about something, actual or merely apparent.

At the same time, as any thought or feeling deals with objects independent of itself, it belongs nevertheless to a stream of consciousness. James (1890/1950) insists, "The universal conscious fact is not 'feelings and thoughts exist' but 'I think' and 'I feel'" (p. 226). There is no impersonal "mind-dust," James argues. This means that every basic durational component of every stream somehow gets appropriated as someone's own or otherwise possesses the mark of a particular personality or subject of consciousness.

But then, how does a stream of consciousness which is, throughout, externally directed manage, anyhow, to be personal, rather than anonymous? The stream is like a mirror that not only reflects, colors, and distorts the parts of the world that it faces at a certain angle, but also the stream manages somehow to make use of the reflections as such and as being its own. A stream of consciousness or temporal section of a stream could not be personal unless it included immediate awareness of its basic durational components, unless it discriminated between its independent objects and itself, as James states in Chapter IX that it does.

In the next chapter, however, James briefly contemplates a stream of mental life that lacks all firsthand acquaintance with its own components and, as will be seen, he leaves it as an open question whether, contrary to his own view, this description applies to our own stream. Astoundingly, the question is left open by James as to whether we are all introspectively blind creatures

(see *Visual and Introspective Blindness* in Part II). It is James who, earlier in the same book, argues at length against the very existence of nonconscious mental-occurrence instances, responding critically to ten purported proofs of their existence. It is James who states that the distinction between the conscious and the nonconscious being of a mental state is “the sovereign means for believing what one likes in psychology, and for turning what might become a science into a tumbling-ground for whimsies” (James, 1890/1950, p. 165; Searle [1990, 1992] recently picked up this theme with reference to cognitive science, psychology, psychoanalysis, and the philosophy of mind).

James argues that there are no nonconscious mental-occurrence instances, to a point that causes me to experience some residual uncertainty when I proffer, later on in the present article (see *Avoiding a Regress* in Part II), a way for James to avoid a regress of inner awareness. This regress would tie up the stream of consciousness as James conceives of it, and would make it impossible to have awareness of something more that lies beyond the stream.

Before I go on, let me just mention that, on my view, there is no contradiction or tension between a mental-occurrence instance's being about something else and also being about itself. It does not have to be either about one or about the other; it can be about both, and often is. I hold that all conscious₄ mental-occurrence instances have, so to speak, a double intentionality. However, let me emphasize, not all mental-occurrence instances are conscious₄. (All mental-occurrence instances are conscious₃, which means that they are about something or would be about something if their apparent object existed, has existed, or will exist; consistently with James's conception of the basic durational components of the stream, mental-occurrence instances are all occurrent awarenesses.) That is, in my view, an intrinsic or self-intimational account of consciousness₄ is more likely true than is an “appendage” account such as James's (see *An Appendage Account of Immediate Awareness* in Part II). Accordingly, it is part of the phenomenological structure of every conscious₄ mental-occurrence instance to make attempted or successful reference to something independent of itself and to be an awareness of itself as well (cf. Smith, 1989).

As will be seen (*Against Self-Intimation* in Part II), James does not agree; he insists that no mental-occurrence instance can be its own object, no matter how complex a mental-occurrence instance it may be, and however many different objects it may have.

The Empirical Me

The discussion in *The Principles* that bears most directly on the purposes of the present article takes place at a point in Chapter X where James is considering that portion of an individual's Empirical Me which James distinguishes

as the individual's Spiritual Self (see below). And again, at the end of the Summary for Chapter X, James (1890/1950, p. 401) brings up the same speculation, although he does so only very briefly and, as before, without subscribing to its truth.

The context this time is how an unobservable transcendental thinker might get theoretically introduced. According to James, his negative speculation regarding inner awareness provides the "only pathway" by which introduction of a transcendental thinker can be accomplished. The stream of consciousness would then consist of a succession of thoughts (i.e., mental-occurrence instances, occurrent awareneses) that must be executed or undergone by a thinker whose existence lies beyond the stream. The stream would then not consist of a flow or sequence of mental-occurrence instances that is most simply described as "thinking goes on," that is, without any reference at all to a distinct subject of experience whose mental-occurrence instances they are. A thinker would think all thoughts.

"Thinking goes on" is, in fact, James's (1890/1950) own much less assumptive view. He holds the thinker is not metaphysical, is entirely empirical, and has no existence apart from particular basic durational components of the respective stream of consciousness. That any stream of consciousness is personal is to be explained, according to James, in terms of certain relations that exist between the stream's components. The universal conscious fact of "I think" and "I feel" does not require a further conscious entity that lies within or metaphysically beyond the human being to whom a stream of consciousness belongs.

What is the Empirical Me? The Empirical Me includes the Material Self and the Social Self, as well as the Spiritual Self. However, nothing specific needs to be said here that applies only to either of the first two of these three selves. James defines the Empirical Me in a narrow sense as "all that [the person] is tempted to call by the name of *me*" (p. 291). The Empirical Me, as thus defined, fluctuates in its composition over time, and varies between individuals with respect to, among other things, how much it includes of all that could be its content.

James allows for the absence from the narrowly defined Empirical Me of large parts of the broadly defined Empirical Me: which is all that the person *can* call his or her own, whether the person does so or not. The broadly defined (or potential) Empirical Me is all that is available — in the environment, body, behavior, and mind — for the person to call "me" or "mine." You may fail to identify with one or another part of your potential Empirical Me, for example even with your body, and perhaps, in a different case, with your entire stream of consciousness, certainly with parts of the latter, as in cases of depersonalization (Natsoulas, 1979).

The Specious Present

Considered concretely, the Spiritual Self amounts either to the individual's entire stream of consciousness, from the inception of its flow onwards, or to that brief segment or temporal section of the individual's stream which constitutes for him or her the "specious present" at a particular time. The specious present, at any time, is the particular set of the individual's mental-occurrence instances, a brief temporal section of the stream, that he or she experiences to be taking place now, in the present moment; although, it should be mentioned, the components of the specious present are also experienced, at the same time, as possessing a temporal order within the now.

The latter qualification is not contradictory, any more than it is self-contradictory to say: what you are hearing now is not merely a certain set of simultaneously occurring sounds, but also a brief temporal section of a stream of sound, a section that is itself comprised of a sequence or flow of sounds (cf. Gibson, 1979/1986).

Note, also, that to have a mental-occurrence instance is not, in many cases, to experience it as well. This important fact, as I claim that it is, comes up again later in the present article (*The Immediacy of Immediate Awareness* in Part II). For now, by way of introduction, let me say that this fact, about experiencing our mental life, obtains as follows with respect to the specious present.

For as long as the individual does not take specific notice of the present moment, there is no specious present in his or her case, except potentially. And when the individual does take such notice, the basic durational components of the stream that make up the present specious present are therein experienced; whereas one or more of them might not be experienced in the absence of any attempt by the individual to perceive time or something about time. However, for not being *experienced*, the potential constituents of the specious present would no less be *experiences*, or basic durational components of the stream of consciousness. They would be experiences of something else (or as though of something else, in those cases where their object does not exist, has not existed, and will not exist) and they would not be themselves objects of experience, that is, objects of immediate awareness. Many basic durational components of the stream of consciousness are experiences that are not themselves experienced.

According to a sympathetic interpretation of James's understanding of the stream of consciousness, some of the particular basic durational components of the stream happen not to be objects of immediate awareness, although they might have been such objects had the total brain process and, therefore, the fully dependent stream of consciousness proceeded differently upon the occurrence of each of those components of the stream (see *Instances of Sciousness and Instances of Con-sciousness* in Part II).

The Self of Selves

One way in which James abstractly treats, at some length, of the Spiritual Self is by conceptually isolating a particular kind of basic durational component of the individual's stream of consciousness that, in adult human beings, is widely distributed throughout the stream. He names this component collectively the individual's "self of all the other selves." According to James, all of us identify most closely ("in an altogether peculiar degree") with those special components of our stream that make up this self of all selves. "Compared with this element of the stream, the other parts, even of the subjective life, seem transient external possessions, of which each in turn can be disowned, whilst that which disowns them remains" (James, 1890/1950, p. 297). The self of selves performs the function, among other functions, of owning and disowning various parts of the stream of consciousness to which it belongs. Thus, the self of selves is not exclusively concerned with what lies beyond the stream. In fact, it is the self of selves that renders the stream, of which it is a widely distributed part, personal rather than anonymous.

It is in the course of his discussion of the durational components of the stream constituting the self of selves that James formulates what I shall be calling here the "Sciousness Hypothesis," the main topic of the present article. An implication of the Sciousness Hypothesis is that the self of selves does not perform the major function that James assigned to it. For how could the self of selves own or disown other components of the stream, in the first-hand way in which it is supposed to do so, if the self of selves (like the rest of the stream) can give noninferential awareness only of some things that lie externally to the stream? This owning and disowning is based, according to James, on how a mental-occurrence instance feels, in a sense that involves immediate awareness of this feeling. James (1890/1950) states,

Each pulse of cognitive consciousness, each Thought, dies away and is replaced by another. The other, among the things it knows, knows its own predecessor, and finding it "warm," in the way we have described, greets it, saying: "Thou are *mine*, and part of the same self with me." (p. 339)

I have previously discussed in some detail James's self of all other selves, and I shall not reproduce any of that discussion here (Natsoulas, 1989–1990). However, what I state above about the Sciousness Hypothesis shall be, of course, explained and expanded.

A Black Box

The Sciousness Hypothesis applies to all of the basic durational components of anyone's stream of consciousness, without exception and under all

conditions and circumstances. This hypothesis claims it to be a general fact that all of the components of anyone's stream of consciousness take place inside a black box (as we would now say). They so take place not just in relation to other people's knowledge of them. Also, contrary to how it seems to you, all knowledge that you may have of your own mental-occurrence instances is perforce of an indirect kind. Thus, all the basic components of the stream of mental life are instances of "sciousness," rather than being instances of "con-scioussness" (see the section in Part II titled *Instances of Sciousness and Instances of Con-scioussness*).

By definition, we know what goes on inside a black box from its outputs, from the external effects that the processes within the black box produce, and no more directly than that. If your mental life proceeds, even for you whose mental life it is, inside a black box, then whatever you may come to know about your mental life you will know on an inferential basis. That is, you will know about it by taking notice of certain of your behaviors or bodily reactions, and drawing inferences therefrom to their explanation, to how they have come to occur. That is, you know of and about your mental life only in the same general ways that other people know of and about your mental life.

According to the Sciousness Hypothesis, we are at the same epistemic distance from our own mental-occurrence as we are from each other's. The whole idea of a privileged, inner perspective on our own mental life is rejected, not as Freud did, just with respect to some of it, but with respect to every element of our mental life. Thus, insofar as the mind (as James says) plays the psychologist upon itself, it plays perforce the objective psychologist rather than the introspective one.

In reading a Sciousness theorist (e.g., Hebb, 1972), one has the impression of a strong underlying motivation at work: namely, to deny to the subjects of the theorist's research, or to phenomenologically guided scientific adversaries, or to the undergraduate students that the theorist must repeatedly face and attempt to educate, or to all three, the possession of any special authority with respect to knowledge of their own mental-occurrence instances. Thus, the victory of a purely objective psychology would be brought home. With regard to the Sciousness theorist's own case, any thesis that he or she might be tempted to draw from firsthand knowledge of experience, the Sciousness theorist could ignore in favor of the commitments of the particular objective psychology developed or adopted.

According to the Sciousness Hypothesis, you do not have that unique access which is often assumed that each of us has to his or her own mental life; that is, to the conscious portion of it, which for James and others (e.g., Brentano, 1911/1973) is the entirety of one's mental life. Indeed, such inner access is commonly assumed, and its existence is not only a commonsensically shared conviction: every philosophical school, James states, has the

reality of this unique access as one of its fundamental assumptions. "Spiritualists, transcendentalists, and empiricists alike admit in us a continual direct perception of the thinking activity in the concrete" (James, 1890/1950, pp. 304–305).

The Sciousness Hypothesis holds that such widespread agreement does not change the fact of the matter, which is that our access to our own mental life is no different in kind from the access that other people have to our mental life. Once again, the consensus has been marching forward together in the wrong direction — as it does, for example, when it assumes, contrary to the science of physics, that we are surrounded by solid, colored objects.

Of course, a theorist who proposes that a version of the Sciousness Hypothesis is true must explain how it is that we seem to ourselves to have immediate awareness of our mental life. It cannot suffice for a Sciousness theorist to say simply that we suffer an illusion each time that we attempt to introspect. Why does this merely apparently immediate awareness of our mental-occurrence instances seem so immediate to us and not at all inferential? What is it that we actually have awareness of in those instances, and why do we take that other kind or those other kinds of occurrence to be mental?

Similarly, a perception theorist who holds that our ordinary perceptual awarenesses of the environment are, instead, actually awarenesses of mental representations that take place inside our own brain must explain how it is that we seem to have perceptual awareness of things and occurrences themselves that exist in the environment. What is the mechanism determining this illusion? The phenomenology here as elsewhere is a natural phenomenon, and therefore requires explanation, whether it is illusory or not. The pertinent phenomenology demands an early explanation when its deliverances contradict a theory proposed.

I expect that any theorist who advocates the Sciousness Hypothesis will have great difficulty in explaining what appear to be the contrary facts of the matter in this case. No doubt, it will be proposed that the Hypothesis should be accepted on other grounds, that is, notwithstanding the appearances in this case, which not unusually contradict the way things really are.

Objection

It may well be pointed out, in response to what I have stated to this point, that some of the outputs of the black box that contains our mental life are private to us. Some of these outputs are behaviors and reactions that take place within the part of the world that is completely surrounded by our bodily surfaces. They occur as B. F. Skinner says: "inside the skin." Only the individual whose behaviors and bodily reactions they are receives stimula-

tion from these behaviors and bodily reactions; and, therefore, only he or she is in a position to observe them firsthand.

Does this not mean that our access to our own mental life is a unique access to it? Whether or not we have immediate awareness of any part of it, we at least know some of this black box's outputs as nobody else can know them.

This objection assumes that we lack all nonstimulational access to our behaviors, which is correct *ex hypothesi*. If we do have an access to our behaviors that does not require stimulation, then it follows that our mental life does not take place entirely inside a black box. In that case, we would have immediate awareness of mental aspects of the process that produces the behavior. How else, than from direct acquaintance with such aspects, could we know of the occurrence of one of our behaviors, given our not receiving any kind of stimulation that the behavior determines? We would have to have some immediate awareness, as in fact we do have in my view, of that part of our mental life out of which the behavior directly emanates.

Indeed, our bodies also effect stimulation that is not the modification of processes proceeding in other people's sense receptors or nerve endings. I take it that the latter statement expresses the underlying and undeniable point of the objection. As a result of stimulation originating from within my body, I may have awareness of a part of my body, or of certain occurrences therein that produced the stimulation. This is analogous to the stimulation of my retinal surfaces by the large solid angle of light that constitutes my field of view at my present point of observation (Gibson, 1979/1986). So too, I may have visual perceptual awareness of the part of the environment that gives structure to the light projecting to my point of observation. The difference from the case of private stimulation is, of course, that the same part of the environment can give particular structure to the visual stimulation of more than one individual; whereas the internal stimulation that a behavior produces occurs in only a single individual.

Reply

The latter statement is indeed true; and it obtains whether the behavior is overt or covert. Whenever one's behavior is overt, it results in external stimulation as well as internal stimulation, and the external stimulation can take place at the sense receptors of other people as well as at one's own. When one's behavior is fully covert, to the point that no one else can feel it even by touching or grasping the part of the body involved, the question of whether the behavior can produce stimulation in other people is technological, a matter of whether the proper instruments exist, and are applied, that can be affected by the particular covert behavior.

If so, then covert behavior could be said to be publicly observable; it would not be open merely to self-observation. However, observation by means of instrument is often considered to be a kind of inferential process, and accordingly falls short of qualifying as observation in the usual sense. That is, the observer perceives outputs from the instrument, say certain dial readings, and infers from these, based on knowledge, something about the behavior that produced them.

However, in my view, if the individual's access to his or her own behavior is strictly stimulatory (in the same sense as, insofar as it exists, someone else's access to the individual's behavior is stimulatory), this means that the kind of access that one has to one's behavior is not unique. The difference in access between the individual and others is only that, with respect to his or her body, only the individual has "nerves going to the right places" (as Skinner would say).

The Sciousness Hypothesis Rejected

James does not call the Sciousness Hypothesis by this or by any other name. Rather, James quickly moves on, setting aside this alternative, radical understanding of the stream of consciousness as traversing both common sense and the assumption of every philosophical school regarding the mind's epistemic relation to itself. James proceeds under the common assumption that, contrary to the Sciousness Hypothesis, we do have immediate awareness of the durational components of our own stream of consciousness (including those components that comprise the self of all the other selves).

In accordance with James's (1890/1950) dualism of the mental and the physical (which is a mind-body dualism that resembles the kind which postulates distinct mental and physical substances), to have immediate awareness of components of the stream is to have awareness of something that is nonphysical and not open to any kind of observation by other individuals. Except in their own case: with respect to their own stream of consciousness, other individuals too are capable of "introspective observation."

An Open Question

After all that James says from an introspective perspective in his famous Chapter IX, early in the next chapter James (1890/1950, p. 305) interestingly leaves it an open question whether in fact the stream of our mental life is "a stream of Sciousness pure and simple." However, this does not mean that James proceeds in a way that is compatible with both the truth and falsity of the Sciousness Hypothesis. It only means that, evidently, James is not in a position to demonstrate that the Hypothesis must be rejected. He simply

assumes that it is false in what follows, as well as in what came before this point in the book. However, by merely assuming the falsity of the Hypothesis, James in effect leaves it standing as an option for psychologists.

A great deal that James writes in *The Principles* contradicts the Sciousness Hypothesis. Nevertheless, as will be seen, one receives the distinct impression that the Sciousness Hypothesis remains, for James, a live option that he is himself tempted to adopt on “introspective” grounds. By using quotation marks in the latter phrase, I mean to call attention to the fact that if the Sciousness Hypothesis were true, one could not have actual introspective grounds in support of it, since the Hypothesis denies that we have any ability to be immediately aware of our mental-occurrence instances. The grounds that tempt James are in quotes “introspective” because, as will soon be seen (in *In Favor of the Hypothesis* in this main section), James acquires these grounds as a result of a particular failed effort to introspect.

If one attempts to introspect and does not succeed in doing so, that is, if one is unable thereby to take notice of something mental, one does not therefore have introspective grounds for the nonexistence of introspection. In fact, as I argue soon (see *Objection* in this main section), so to conclude from such an attempt requires that one have immediate awareness of, as it were, the notice that one does successfully take in attempting and failing to introspect (cf. Natsoulas [1983] on Hebb’s effort to debunk consciousness₄).

That James remains somewhat open-minded regarding the Sciousness Hypothesis is very interesting because, in James’s view, both psychology in general and his own investigations in particular perforce rely “foremost and always” on introspection. (The latter clause directly contradicts how a prominent advocate of the Sciousness Hypothesis interprets James [Hebb, 1974].) In fact, James’s (1890/1950) commitment to the thesis that “all people . . . feel themselves thinking, and . . . distinguish the mental state as an inward activity or passion, from all the objects with which it may cognitively deal” (p. 185) is so strong that James resorts to characterizing any doubts regarding the certainty of this thesis as being “metaphysical” and therefore beyond the scope of his book.

Quick Work

At the close of Chapter X, James (1890/1950) writes, tendentiously I believe, as follows.

[If we] deny that we have any *direct* knowledge of the thought as such [i.e., of the stream of consciousness] . . . the latter’s existence would then be reduced to a postulate, an assertion that there *must be* a *knower* correlative to all this *known*; and the problem *who that knower* is would have become a metaphysical problem . . . that carries us beyond the psychological or naturalistic point of view. (p. 401)

James does not specify how postulating a stream of mental life, as opposed to having direct knowledge of it, would create a metaphysical problem regarding who the knower is. It seems to me that a Sciousness theorist might hold that the knower is not a distinct existence from the stream of mental-occurrence instances that the theorist postulates to exist and that is supposed to be the knowing. And some theorists who hold that we do have direct knowledge of our stream of consciousness also propose that there is a corresponding inner knower who is distinct from the stream. Others of these theorists, including James, do not propose the existence of an independent knower.

For James, the stream, or certain components of it, is itself the knower. Psychologically, according to *The Principles*, we are no more than our stream of consciousness (unless, abnormally, we have a dual consciousness, that is, a second stream of consciousness that results from a somehow bifurcated total brain process). Whereas James is adamant about never theoretically identifying the mental act of knowing with what is thereby known, he explicitly refuses to locate a knower externally to the stream of consciousness, so that a knower might observe or produce the stream, or put the stream to various uses from the knower's privileged position in relation to it.

So too, an advocate of the Sciousness Hypothesis might not only deny that we have direct knowledge of the mental, but also deny the existence of a knower to go along with the stream of mental life that this theorist postulates despite the purported absence of any direct evidence for it. Indeed, the nonexistence of a knower would seem to be especially compatible with the nonexistence of immediate awareness. An inner knower will almost certainly be expected to have immediate awareness of any mental acts of knowing in which this inner knower is involved.

An inner knower is normally thought of as performing acts of knowing. And, generally, one cannot be considered as doing something mental of which one does not have immediate awareness. If an instance of such non-conscious doing appears to be the case, it is typically explained as not being really a matter of one's doing something. The particular mental activity is considered to be passive, to happen to one, rather than being something that one does. One undergoes that mental activity. Or, alternatively, it is a case of mental action that gets attributed to a different agent who also operates within one, that is, to a second ego or subject of mental life who performs the action from some sort of location within oneself.

Ambivalence

The above quick work by James is performed on an alternative hypothesis that, in my view, is not without some scientific value. Such a quick, albeit well-informed dismissal is uncharacteristic of James's approach to hypotheses

contradicting the ones which he favors. Perhaps James's way with the Sciousness Hypothesis reflects an ambivalence regarding it. By considering it to be metaphysical, he can maintain his original view without having to come to terms with an alternative to his view that he finds attractive.

On the one hand, James exhibits a deep understanding of the Sciousness Hypothesis, to the point where he could be taken, momentarily, as an actual advocate of the Hypothesis; such is James's eloquence, and his deployment, with regard to the self of all selves, of reasoning that is close to the Sciousness Hypothesis (see next subsection).

On the other hand, James shows a desire not to allow the Hypothesis to divert him. Adoption of the Sciousness Hypothesis would require, to understate the matter, an extensive revision of James's thinking about the mind and, of course, of much of his work on the manuscript to date.

An interpretation in terms of ambivalence in James's attitude toward the Sciousness Hypothesis is made more plausible also by James's advocacy later on in his career of a kind of neutral monism with regard to the mental and the physical. According to this neutral monism (which replaced the dualist mind-body interactionism of *The Principles*), the world consists exclusively of "pure experience." Although the world and its many constituents are all instances of pure experience, they can each be apprehended as either mental or physical. However, these apprehensions are mere ways of taking instances of pure experience, rather than being a reflection of the ultimate nature of that which is thereby taken. In James's later view, a pure experience is neither physical nor mental in itself.

In Favor of the Hypothesis

In this subsection, I present three comments that involve a favorable view of the Sciousness Hypothesis. In the next subsection, I present an objection of mine to the third of these three comments. In the subsection following the latter one, I describe and reject three proposals that a Sciousness theorist might proffer to meet my objection.

1. The Sciousness Hypothesis is no more metaphysical than is the common conviction — which James (1890/1950) in effect, by his quick work on the Sciousness Hypothesis, refuses to submit to critical examination — that we do have immediate awareness of the basic durational components of our stream of consciousness. In order for James to be consistent in holding that the Sciousness Hypothesis and, presumably, all the alternatives to it are metaphysical proposals, rather than empirical ones, James must show that making a choice from among the alternatives requires the introduction of nonphenomenological "deeper-lying entities (whether the latter be named 'Soul,' 'Transcendental Ego,' 'Ideas,' or 'Elementary Units of

Consciousness'") (James, 1890/1950, p. vi). Otherwise, how can the Sciousness Hypothesis be justifiably set aside without its first receiving full consideration as an alternative empirical hypothesis?

James makes no effort to show that the Sciousness Hypothesis and its competitors constitute metaphysical choices. Indeed, James manages to give vivid expression to the Sciousness Hypothesis by means of the very terms with which he is discussing the stream of consciousness from a psychological, empirical perspective. Moreover, James could have considered the alternatives from a purely introspective standpoint, choosing from among them the one that seemed most consistent with his own and other reliable informants' firsthand inner evidence. James might have chosen on this basis the account of inner awareness that he in fact favors (see *An Appendage Account of Inner Awareness* in Part II). Or he might have been led in a different direction (see the third comment below).

2. Although I consider the Sciousness Hypothesis to be false, I acknowledge that, in one form or another, it has a place among current alternative scientific understandings regarding how we each know what is taking place in our own mind. After all, present-day mainstream psychology is a psychology that has been shaped by the theory of evolution, the behaviorist revolution, the computer metaphor, and a materialist construal of the mental (albeit very limited and vague as yet). Highly compatible with this kind of psychology, as it is not compatible with a phenomenological psychology (which has different sources), the Sciousness Hypothesis proposes that whatever access to our own mind we may have is purely conceptual, a matter of our acquiring beliefs on the spot regarding what is going on there. Thus, the mind is no different from everything else in the universe, since it does not know itself any more directly than it knows other things. There is no essentially privileged knowledge that might challenge a unified understanding of all things.

3. Although James does little with the Sciousness Hypothesis, it is clear that the Hypothesis holds some attraction for him: specifically, in the light of what exactly it seems to James that he has awareness of when he is supposed to be having immediate awareness of those durational components of his stream that constitute his self of all the other selves. His corresponding phenomenological report is the following.

In a sense, then, it may be truly said that, in one person at least, the "*Self of selves,*" when carefully examined, is found to consist mainly of the collection of these peculiar motions in the head or between the head and throat. I do not for a moment say that this is all it consists of, for I fully realize how desperately hard is introspection in this field. But I feel quite sure that these cephalic motions are the portions of my innermost activity of which I am most distinctly aware. If the dim portions which I cannot yet define should prove to be like unto these distinct portions in me, and I like other men, it would fol-

low that our entire feeling of spiritual activity, or what commonly passes by that name, is really a feeling of bodily activities whose exact nature is by most men overlooked. (James, 1890/1950, pp. 301–302)

In effect, James is saying here that an effort to introspect those components of the stream that make up the self of all the other selves reveals nothing about the components themselves, only about certain bodily activities that are, presumably, associated with those components of the stream.

Therefore, it may in fact turn out that what seem to us firsthand to be mental happenings of which we are immediately aware are actually bodily occurrences that we sensorially perceive insofar as we do perceive them. In that case, introspection would literally be perceptual. Introspection would not be a process or activity (of inwardly “specting”) that is analogous to perception, as some theorists contend (e.g., John Locke). Rather, introspection would be as perceptual as is one’s taking notice by direct sensory means of other happenings that are occurring in one’s body.

Therefore, what we know concerning our own mental life we know by inference based on what we perceive while attempting to introspect and at other times. Such a phenomenologically based argument, arising from James’s attempted introspection of the self of all other selves, is consistent with the Sciousness Hypothesis and, as will be seen next, shares its main weakness. The argument also suggests that choosing the Sciousness Hypothesis over its competitors is an empirical choice, rather than being a metaphysical one as James suggests.

Objection

The argument just expressed seems to me to contradict itself. It is no help at all in making the case for the Sciousness Hypothesis. The argument assumes that we possess an ability to tell that we are perceiving some of the events that take place in our bodies. This implies that we can tell we are having certain particular perceptual awarenesses, that we can tell our stream of consciousness contains certain perceptual experiences. As I have argued elsewhere, at some length, we normally know when we are perceiving something by having immediate awareness of perceptually experiencing that something (Natsoulas, 1993a).

If all immediate awareness is impossible, as the Sciousness Hypothesis holds, then how do we have awareness of our perceptual experiences? Presumably, this indirect awareness is an outcome of a process of inferring from something else, of which we have perceptual awareness.

But what might this inferential basis be? For example, in a case such as my having perceptual experience of the music that is now filling the air of the room where I now sit, and my being aware of having this perceptual experi-

ence, what is the inferential basis of this purportedly indirect awareness of my perceptual experience? We seem to know from moment to moment precisely what of the music that is sounding we are having perceptual experience of. How do we know this, on what basis, given that, according to the Sciousness Hypothesis, we have no immediate awareness of the auditory perceptual experiences themselves that are an essential part of hearing the music?

My own answer is that we could not know what we are experiencing in the absence of all immediate awareness. Theoretically, we could know by inferential means what we are experiencing; however, these inferential means require, I suggest, having immediate awareness of something else, of another kind of awareness. This can be seen if one examines, as I do next, three proposals regarding how we may indirectly know that we are hearing the music that we are hearing. I consider these proposals inadequate to the task because they in effect import immediate awareness of mental-occurrence instances into a process of knowing that is supposed to be a theoretical substitute for immediate awareness.

Three Proposals

A Sciousness theorist might proffer one or more of the following three replies to my objection of the preceding section. Upon stating each proposal, I argue that it cannot do the required job without implicating inner awareness. Acquiring knowledge about the elements of one's stream of consciousness requires, I suggest, a process that involves, although it need not consist entirely of, the purportedly nonexistent inner awareness.

1. An inferential basis that a Sciousness theorist might propose is *the behavior in which we are engaged while having the particular perceptual experiences*. That is, we would take note of our behavior and infer from its characteristics the characteristics of the stream of perceptual experiencing that is postulated to be part of the behavior's causation.

However, I reply, our behavior is normally not highly informative in this respect: with regard to the myriad details that we can tell that we are perceptually experiencing over even a very short period of time. Consider, for example, how much we are aware of ourselves as hearing when we are listening to music, whereas the only relevant behavior that we may detect in ourselves, all the while, may be simply our beating time to the music. When our behavior consists of more than the latter, such as humming along with the music, it is clear to us, and to anyone else who is listening to our contribution to the performance, that what we are behaviorally providing is highly restricted in its dimensionality as compared to the music that we are hearing.

It is common for us to compare our behavior in response to music with our auditory experience of the music and to find the behavior wanting relative to

the experience. How do we make such a comparison? Our auditory experience in this case is not, I suggest, a Sciousness pure and simple; we are aware of hearing the music by having immediate awareness of our auditory experience of it. Our auditory experience does not proceed as though, from our inner perspective, it were not proceeding.

2. Another basis for inference to our perceptual experience that a Sciousness theorist may propose, using the same example, is *the perceived properties of the music itself*. That is, according to this second proposal, we have perceptual experience of these properties, and infer from the fact of their being instantiated here and now that we are having perceptual experience of them.

However, there is nothing about those objective properties of the music that somehow points to ourselves, so that we might make an inference from them to something about ourselves. For example, from the fact that a certain melody is being sung, nothing follows about our hearing it. As Findlay (1966) states: "For how should X mediate a conclusion involving matters not entering into the description of X at all" (p. 170)? How should fact F_1 , namely that a certain melody is being sung, mediate the conclusion that I am having auditory experience of the melody, if my auditory experience of the melody does not enter into the description of fact F_1 at all?

From fact F_2 , that a certain melody is being sung in this auditorium in which I am now sitting, nothing follows about my hearing the melody unless the singing is loud enough for me to hear it. And I know that it is loud enough for me to hear it not by inference from perceiving something else, but from being immediately aware of my auditory experience of the singing. My personal link to the properties of the music is my perceptual experience of the properties.

However, any immediate awareness of my perceptual experience of the music has been ruled out by the Sciousness Hypothesis. This makes it impossible for me to infer anything from the properties of the music now being played in this auditorium, because I must be aware of my experience of those properties in order to make such an inference.

3. It may be argued that, in the example, we base our inference concerning our perceptual experience on *our having knowledge that music is here and now being played and of the kind of music it is and its various properties*. We acquire this knowledge perceptually, by hearing, and we infer from this knowledge how we acquired it, including the perceptual experiences involved. That is, our having perceptual experience of the music, and the character of our perceptual experience, follows from the fact that we know what music it is that is here and now being played.

Of course, I may know that and what music is being played in a certain place even in the absence of my having any auditory experience of it, but let

me not pursue that point. Instead, let me ask how I know, not in the ways that I know about music sounding somewhere else, that I have knowledge that and what music is here and now sounding? That is, how do the required premises manifest themselves mentally, from which I can draw my inferences? The answer must be either (a) that I have occurrent thoughts to the effect that music is here and now being played, and so on, (b) that I hear myself saying so, overtly or in my mind's ear, or (c) that I perceive myself engaging in behavior that I interpret as reflecting such knowledge.

In all three cases, the answer implies that I have immediate awareness of something taking place in my stream of consciousness, namely, thoughts, auditory experiences, or whatever kind of perceptual awareness is involved, essentially, in my perceiving the particular behavior proposed as the inferential basis. Without immediate awareness, it would be for me as though I were not having those thoughts, as though I were not hearing myself speak, and as though I were not perceiving myself behaving (Natsoulas, 1993a).

Affinities

James (1890/1950) clearly does not adopt a skeptical position with regard to the existence of the kind of introspection that does not amount merely to sensory perception of something else, other than components of the stream of consciousness. Also, his conception of immediate awareness is not of the variety that analogizes to some kind of process of perceiving (see *An Appendage Account of Inner Awareness* in Part II). Nevertheless, James's understanding of how inner awareness takes place is of a kind that should recall his having been attracted, however transiently, by the Sciousness Hypothesis.

As should, also, certain present-day accounts of how we have immediate awareness of our mental-occurrence instances, those that I have called "appendage" accounts of consciousness₄ (Natsoulas, 1993b). These accounts are, I suggest, versions of the problematic Sciousness Hypothesis, notwithstanding their being sometimes claimed to be more than that. Unconvincingly, they are claimed to be adequate explanations for the uniquely intimate contact that we have with our own experiences; as though such contact merely consisted of our undergoing an additional experience, one that is directed on another experience, which precedes it in the same mind. As will be seen in Part II of this article, one is led to wonder by such accounts why it matters, insofar as immediate awareness is concerned, that the two experiences are occurrent parts of the same mind.

Contradicting in effect the common conviction that we have unique access to our own experiences, such appendage accounts of immediate awareness hold that our firsthand access to our own minds takes place in merely an "abstract, hypothetic or conceptual way," as James says in spelling out the

Sciousness Hypothesis (see quote at head of present article). I shall return to this point, to such accounts, which can be shown to be false by means of a simple fact: we experience a good portion of our mental life, rather than just having mental-occurrence instances and experiencing something else in having them (see *The Immediacy of Immediate Awareness* in Part II).

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