

Tertiary Consciousness

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Direct (reflective) awareness, or the immediate, on-the-spot, noninferential access that we have to some of our mental-occurrence instances, is a kind of "secondary consciousness." It often happens, in addition, that direct (reflective) awareness itself is conscious, meaning that one is also directly (reflectively) aware of being so aware. This is "tertiary consciousness." Indeed, absent tertiary consciousness, one could not base actions on what is mentally occurring to one now. Although Armstrong held that "subliminal introspection" suffices for purposive mental activity, tertiary consciousness would seem to be necessary for carrying out such activity because purposive mental activity essentially involves choosing what mentally to do next on the basis of "introspective" feedback. One must be aware of whatever it may be that one is basing one's actions on. Adopting, in place of "subliminal introspection," either one of two Jamesian hypotheses could save Armstrong from having to posit nonconscious purposive mental activities.

Direct (Reflective) Awareness

As I did in some of my earlier articles on the topic of consciousness (e.g., Natsoulas, 1993b), I shall use the phrase *direct (reflective) awareness* in the present article to refer to either of the following:

1. *The immediate, on-the-spot, noninferential, cognitive access that human beings, some animals perhaps, and certain neurological parts of human beings possess to some of their mental-occurrence instances.* Here is an illustration of how I would use *direct (reflective) awareness* to convey this sense:

The left cerebral hemisphere of a human being who has submitted himself or herself to the surgery of complete forebrain commissurotomy possesses the capacity for direct

(reflective) awareness with respect to the distinct mental life that is proceeding in that hemisphere, but there can be no direct (reflective) awareness across cerebral hemispheres.

2. *Particular individual instances of the above kind of mental apprehension.*

Accordingly, I might write, for example, the following sentence:

The thought that he was himself responsible for what had happened passed through his mind several times that day, but he had no direct (reflective) awareness of any of those mental-occurrence instances and, consequently, he based none of his actions on them — although, unbeknownst to him, they had a noticeable effect on his behavior by affecting him emotionally.

Also, I shall speak of someone's being or having been *directly (reflectively) aware* of one or another particular mental-occurrence instance or of a number of them. For example, I might say,

She faintly heard shouts of fire coming from the quad and, being directly (reflectively) aware of the auditory experiences that were an essential part of her hearing the shouts, she reported hearing the shouts to the other members of the class, who thereupon also became directly (reflectively) aware of hearing them.

This first main section of the present article consists of five categories of comment whose purpose it is (a) to bring out what direct (reflective) awareness is and (b) to provide some familiarity with my general approach to consciousness. In the second main section, I introduce the central topic of the remainder of the article: namely, *the psychological importance of that higher "level," so to speak, of direct (reflective) awareness which I am calling "tertiary consciousness"* (cf. Natsoulas, 1989b).

Why have I chosen the latter name for the psychological phenomenon that is my present topic? Many readers will find my notion of a third "level" of consciousness puzzling, at least to begin with. It will seem to them that the objects of direct (reflective) awareness are, instead, always "first-order." These readers will want to object along something like the following lines to my effort to introduce a notion of tertiary consciousness into present-day psychological thought. They will want to say,

Just as you stated above, is not one or another mental-occurrence instance the object — meaning the intentional object in Franz Brentano's (1911/1973) sense — of every case of direct (reflective) awareness? Therefore, the more appropriate modifier for the consciousness to which you are adverting would seem to be *secondary* rather than *tertiary*. Consider the common example of someone who is wanting here and now a particular something and is aware at the same time of wanting it, even perhaps of wanting it badly. This wanting would be a case of "primary consciousness." It would consist of a number of instances of "primary consciousness" either one after another or in relative temporal proximity to each other. And, in being directly (reflectively) aware of these mental-occurrence instances that constitute the wanting, the individual would also be

instantiating "secondary consciousness." Why do we need to introduce yet another level into our effort to understand an already difficult phenomenon?

In the present article, I hope to convince the reader: that more than secondary consciousness is involved in many ordinary cases of one's being conscious of something. But first, in order to set the stage for my discussion of tertiary consciousness, let me present a series of preliminary comments on mental-occurrence instances and our direct (reflective) awareness of them.

1. The Objects of Direct (Reflective) Awareness

Indeed, as the objection states, the "objects" of direct (reflective) awareness, those items of which one has such awareness, are mental-occurrence instances. They are never anything else — even if it is true that our perceiving the surrounding environment and ourselves in it is just as direct as James J. Gibson (1979/1986) contended that it is. *Perceptual awareness may actually be direct, but it should not be confused with the direct (reflective) awareness that one often has of one's mental-occurrence instances.* In fact, included among the objects of direct (reflective) awareness are some of one's perceptual awarenesses themselves — as well as instances of one's feelings, intentions, thoughts, wishes, and the like. Perceptual awareness and direct (reflective) awareness have different kinds of objects, except insofar as one can properly be said to perceive an aspect of another individual's mental life in perceiving the other's actions, behaviors, or expressions.

As present-day psychologists normally use the word, one does not "perceive" one's own mental-occurrence instances. It may be true as one kind of account of direct (reflective) awareness proposes: *that some perceptual awarenesses (among other kinds of mental-occurrence instances) are individually and intrinsically awarenesses of themselves as well, in addition to being awarenesses of the environment or body.* However, such an account of direct (reflective) awareness does not imply that all direct (reflective) awareness involves perceptual awareness in some way. Some of our thoughts, for example, are also held by such an account to be awarenesses of themselves, as well as of something else, but nothing literally perceptual is thereby proposed to be involved in a thought's being intrinsically self-aware.

It may be true as another kind of theory of direct (reflective) awareness proposes: *that direct (reflective) awareness is perceptionlike, that it is a kind of (inner) observation which takes place not by means of the senses.* Again, there follows neither (a) that any of our perceptual awarenesses are instances of direct (reflective) awareness, nor (b) that our direct (reflective) awarenesses are instances of perceptual awareness. Perceptionlike direct (reflective) awareness is *analogous* to perceptual awareness, but such accounts do not construe direct (reflective) awareness to be a *species* of perceptual awareness.

I have mentioned such mental occurrences as perceptual awarenesses, intentions, wishes, thoughts, and feelings as examples of the objects of direct (reflective) awareness. And I have stated that the objects of direct (reflective) awareness are mental-occurrence instances in every case. What is the distinction between a mental occurrence and a mental-occurrence instance?

A mental-occurrence instance is one among many possible instances of one or another mental occurrence, that is, of a certain specific type of mental occurrence. A mental-occurrence instance is an actual case of a particular mental occurrence, except that I also speak of potential or future mental-occurrence instances, and of mental-occurrence instances that may or may not have taken place (we do not know), and of mental-occurrence instances that could have taken place, but actually they did not.

Accordingly, the thought that it is raining in London at the moment is an example of a mental occurrence. This thought, among many other thoughts, is experienced, undergone, or “lived through,” as the phenomenologists say, many times by the same person and by different people. All of these concrete instantiations are mental-occurrence instances of the same thought. They are, I would say, the same mental occurrence as it recurs again and again.

I shall often speak of one or more mental-occurrence instances without identifying which mental occurrences they are instances of. My statements at such points are intended to be general, to apply to *all mental-occurrence instances without regard to their kind*. At those points, what I am proposing, suggesting, or mentioning does not depend, in my view, on which one or ones of the many possible different mental occurrences may be instantiated.

Direct (reflective) awareness of a mental-occurrence instance may take place only at the time of the mental-occurrence instance. This means that one’s having thoughts about a past or future mental-occurrence instance is not the equivalent of one’s having direct (reflective) awareness of the mental-occurrence instance — even when one’s thoughts about the mental-occurrence instance seem to take place spontaneously, out of the blue, as we say. The relation between a mental-occurrence instance and direct (reflective) awareness of it involves no mediating mental occurrences, as would be necessary, I should think, in the case of having “spontaneous” thoughts about a past or future mental-occurrence instance. A mental-occurrence instance may seem to us to come from out of the blue; but, in all likelihood, something mental was directly involved in bringing that mental-occurrence instance into being here and now.

2. *Unique Mental-Occurrence Instances*

“One cannot step twice into the same river, for the water into which you first stepped has moved on” (Davenport, 1979/1995, p. 160). Thus wrote

Herakleitos; and I do not mean to contradict William James's (1890/1950) claim: *that, with respect to the states that successively make up the stream of consciousness, change is the rule without exception*. No basic durational component of the stream of consciousness is ever the same in all of its properties as any other basic durational component of the stream has been or will ever be. As James rightly argues: "No state once gone can recur and be identical with what it was before" (p. 230).

James (1890/1950) quotes Shadforth Hodgson as follows in the latter connection, giving credit where it is due as is James's admirable practice: "The chain of consciousness is a sequence of *differents*" (p. 230). However, James makes no mention of Herakleitos in *The Principles* notwithstanding that both Herakleitos and James put what amounts to the same example to use in order to make similar points regarding the ubiquity of change.

I accept James's claim concerning the stream of consciousness, yet I also hold: *that the same thought or feeling can and often does occur more than once*. Two or more mental-occurrence instances — which are, as James holds, complex states of consciousness — may possess sufficiently similar cognitive and qualitative contents for us to count them as the same thought or feeling. For example, one might repeatedly have feelings of anger regarding a particular event that one has witnessed, as might a number of other people who also witnessed the same event. Indeed, every one of those feelings of anger would be different from every other one of them, whether or not they all occurred in the same person. Yet all would be instances of feeling angry about one and the same state of affairs.

I believe that James (1890/1950) was on the right track when he stated, "An unmodified feeling [is] an impossibility; for to every brain-modification, however small, must correspond a change of equal amount in the feeling, which the brain subserves" (p. 233). However, there is an important sense in which we may feel the same as we have before about an event or state of affairs. We may again feel angry and judge our anger not to have changed at all, although, in fact, it has changed, just as James contends. But also, the anger has remained partially the same, and not only with respect to, as James emphasized, what its object is, or with respect to whatever the anger may be affirming, as it were, about its object. What one is experiencing is anger and it can include emotional qualities that are much the same as those that constituted previous instances of the same anger, as well as involving, as a cognitive part of it, the same judgment about its object as before.

3. *Nonconscious Mental-Occurrence Instances*

We do not have direct (reflective) awareness of all of our mental-occurrence instances, in my view. Some mental-occurrence instances are not "con-

scious"; that is, they are not objects of direct (reflective) awareness. Thus, I agree with Brentano (1911/1973, p. 102) when he says that there is nothing absurd or self-contradictory in speaking of a mental-occurrence instance of which its owner has no awareness.

However, Brentano argued against the actual existence of nonconscious mental-occurrence instances. Although the notion of nonconscious mental-occurrence instances is not self-contradictory, *all* mental-occurrence instances are *in fact* objects of direct (reflective) awareness. Those psychologists and philosophers who contend otherwise are wrong, but they are not speaking absurdly in Brentano's view (contrast Gurwitsch, 1950/1985).

As will be evident in the next category of comment, I disagree with Brentano concerning the nonexistence of nonconscious mental-occurrence instances. But I agree with him on yet another important point:

All mental-occurrence instances either (a) are, or involve intrinsically, the apprehension of something or other that is distinct from themselves, or at least (b) they are just as though this were the case, whenever that which they would be about does not exist, has not existed, and will not exist.

In the specific sense of being apprehensions or seeming apprehensions of something, "all mental phenomena are states of consciousness," as Brentano (1911/1973, p. 102) claims. Or, as I would say, all mental-occurrence instances literally are or crucially involve occurrent awareness.

However, from a mental-occurrence instance's being, or as though being, an occurrent awareness of something or other distinct from the mental-occurrence instance, *nothing at all follows regarding whether the mental-occurrence instance is an object of direct (reflective) awareness*. That nothing follows concerning direct (reflective) awareness depends, of course, on the concept of consciousness or awareness at work. I return to my above claim in the third main section of the present article, where I have occasion further to spell out the concept of consciousness or awareness at work in my claim. See the subsection titled "Conceptual Development."

Note my use of the adjective *occurrent*. I mean to make clear that the awarenesses to which I am referring are *not mere instances of knowledge or belief*; that is, they are not cases simply of one's being disposed to think that such and such is the case. Rather, my notion of an awareness is the notion of an actual happening that may be a part of a larger though no less occurrent mental state. My notion of an awareness is modeled on the successive pulses of mentality that are held to constitute James's stream of consciousness and that typically consist, each of them, of a number of awarenesses in the active sense (Natsoulas, 1992–1993; cf. Gurwitsch, 1950/1985).

However, I do not share in James's (1890/1950) dualism of the mental and the neurophysiological — which, in his later works, James abandoned in

favor of a neutral monism according to which all of the items that make up the world are neither physical nor mental but, rather, are instances of a neutral kind of "experience." Instead, I hold that the stream of consciousness is an ongoing process in the brain itself. In *The Principles*, James's view was that the total brain process produces a stream of consciousness which, although it belongs to a human being, is not itself a part of the physical world.

4. *Conscious Mental Occurrences*

Two large categories of cases exist, I assume, in which a mental-occurrence instance takes place without its being an object of direct (reflective) awareness. I identify one of these two kinds of cases in the present subsection, the other in the next subsection.

Instances of the same mental occurrence may, some of them, be objects of direct (reflective) awareness, and some of them may not be such objects. For example, in the course of listening to a lengthy piece of music, many of one's auditory experiences of the performance will indeed be objects of immediate, noninferential awareness. But one may well hear some parts of the performance without direct (reflective) awareness of those auditory experiences that make up one's hearing those parts. One does not stop hearing music every time one ceases to be aware of hearing it.

When we adopt, as we occasionally do, a special "introspective" set or attitude, our purpose is to increase for a short time the relative frequency of mental-occurrence instances of which we have direct (reflective) awareness. We may be interested in simply finding out about whatever may happen to be going on in the stream. Or, alternatively, we may be interested in apprehending a particular kind of mental-occurrence instance, for example, what exactly, under the present culinary circumstances, our gustatory experiences are like.

After we adopt an introspective attitude, our stream of consciousness flows on with more of its components being immediately apprehended than were apprehended before adoption of the attitude. Different theoretical accounts of direct (reflective) awareness interpret differently the increased relative frequency of conscious mental-occurrence instances that take place upon adoption of an introspective attitude. Elsewhere, I have distinguished three kinds of such accounts (Natsoulas, 1993b).

(a) According to one of these kinds, the "mental-eye" kind of account of direct (reflective) awareness, when you adopt an introspective attitude, you turn your attention onto your stream of consciousness and you engage in the mental activity of monitoring the stream. That is, *you focus something like an inner eye upon your stream and you observe what is taking place therein.* You take notice of the mental-occurrence instances that are, one after another, being accreted to your stream as it grows longer in the dimension of time. This

introspective noticing resembles a perceptual process or the cognitive outcome thereof.

(b) Another kind of view, the “appendage” kind of view, of the effects of adopting an introspective attitude would describe you, instead, as *thereby increasing the frequency of a certain particular kind of accompaniment, response, or reaction to the individual mental-occurrence instances that make up your stream one after another*. Each of these accompaniments or responses or reactions is a direct (reflective) awareness of the particular component of your stream with which it is associated, and is numerically distinct from that component. None of these “appendages” (so to speak) is mediated by an observation or apprehension of the stream; they are each of them themselves what such inner apprehension is proposed to consist of.

(c) Still another kind of view, the “self-intimational” kind of view, of how adopting an introspective attitude affects for a time your mental life, contends that switching into this frame of mind causes to take place in you, instead, a *greater frequency of mental-occurrence instances with a certain kind of intrinsic phenomenological structure*. These “self-intimating” (cf. Ryle, 1949) mental-occurrence instances are intrinsically objects of direct (reflective) awareness. That is, they give awareness each one of itself, simply by their taking place, without evoking, producing, or serving as an occasion for a separate, distinct awareness that is directed on them.

All three kinds of view of direct (reflective) awareness that I have just mentioned allow that a mental occurrence may be instantiated in either way: an instance of a mental occurrence may be an object of direct (reflective) awareness, whereas another instance of the same mental occurrence may not be such an object.

5. *Mental Darkness*

Perhaps there exist, as well, mental occurrences that differ fundamentally from those that I have described in the preceding category of comment. To these other, permanently occluded mental occurrences, the last statement of the preceding paragraph is not applicable. These mental occurrences are such that *none of their instances can ever be an object of direct (reflective) awareness*. None is ever a part of our conscious mental life. These mental occurrences are properly called “nonconscious” mental occurrences and are distinguished from the “conscious” ones that I described in the preceding subsection. Some of the instances of every conscious mental occurrence are objects of direct (reflective) awareness, whereas a nonconscious mental occurrence always occurs in the mental dark, as it were.

For example, among the nonconscious mental occurrences that I have in mind here are the unconscious wishes that are posited in Freud’s theory. No

conscious counterpart of any of these wishes can ever possess, according to his theory, the identical content as possessed by the respective unconscious wish — not even after complete elimination of the repressive defenses that prevent the elicitation of a faithful counterpart wish in the stream of consciousness (i.e., within Freud's anatomically distinct perception—consciousness system), that is, not even when the unconscious wish has become a “preconscious” wish. Anyway, we may speak of the counterpart conscious wish as now, finally, coming to be the same as the unconscious wish — and of it now being possible for the person to function harmoniously or in a congruent or integrated manner across the conscious and nonconscious “levels.” The previously unconscious wish, which has finally become preconscious through the therapeutic elimination of repression, now enjoys ready access to consciousness in the sense that it readily elicits a faithful conscious counterpart, rather than determining a variety of defensively constituted conscious mental-occurrence instances. One now consciously wishes for what one could wish for before only unconsciously. But, according to Freud's theory, the conscious counterpart must fall short of expressing, as it were, the actual full content of the corresponding unconscious wish that has become preconscious.

In any case, even supposing the two wishes could actually be identical in their contents, what we would have direct (reflective) awareness of would nevertheless be the conscious counterpart. The nonconscious mental occurrence whose instances are responsible for the occurrence of its conscious counterpart would remain themselves, given their intrinsic nature, without any possibility of ever becoming objects of direct (reflective) awareness. This inherent difference may also characterize many of the mental occurrences that cognitive psychologists posit in order to explain their subjects' behavior, the psychologists insisting that these mental occurrences produce their effects on behavior without being instantiated by any of the components of the subjects' stream of consciousness.

I would like to be able to say that all human beings possess direct (reflective) awareness of their mental life, that all of us undergo some conscious mental-occurrence instances, that none of us exists in complete mental darkness. For it is my view: *that direct (reflective) awareness is an achievement of natural selection, and a crucial part of how we individually adapt to our environment, with possible exceptions owing to cooperation.* Direct (reflective) awareness is not just a happy contingency in the lives of some individuals or groups, who happen to be rendered “introspective” by their circumstances or fellows (cf. Skinner, 1953, 1957, 1976).

I must acknowledge that some “mind-blind” human beings may well exist among us. They too would undergo mental-occurrence instances but, because they are suffering from anatomical or physiological insufficiencies, they could

not have awareness of any of their mental-occurrence instances. But be that as it may, it is as certain as any scientific proposition can be that the rest of us do not live in complete mental darkness. The rest of us do not possess the kind of mind whose occurrences we cannot in any instance apprehend directly.

Introduction to Tertiary Consciousness

What Is Tertiary Consciousness?

Not only are we directly (reflectively) aware of some of our mental-occurrence instances. We also possess a *firsthand means by which we apprehend our being so aware in particular instances*. I refer to that firsthand means when I use the phrase *tertiary consciousness*.

As mentioned in the preceding section, theorists differ in their understanding of how direct (reflective) awareness is accomplished. How it is accomplished remains far from obvious despite our often taking notice of our having direct (reflective) awareness of one or another mental-occurrence instance. There should be no doubt about the fact of our taking such notice. When we apprehend a part of our mental life, we do not in every case simply apprehend it; also, we may be occurrently aware of apprehending it. A particular instance of direct (reflective) awareness may be a conscious awareness, rather than being a simple — or, one might even say, a nonconscious — awareness of a mental-occurrence instance.

Interestingly, the latter of these two notions — the nonconscious direct (reflective) awareness of a mental-occurrence instance — may also require some getting used to. One undergoes a certain mental-occurrence instance, one is directly (reflectively) aware of it, but one may not be aware that one is so aware. Analogously, the mental-occurrence instance that I just mentioned is conscious in two senses. It is both (a) an occurrent awareness actually of or as though of something else and (b) an object itself of direct (reflective) awareness. So too, the respective instance of direct (reflective) awareness may be itself conscious in either the first above sense or in both the above senses.

I use *tertiary consciousness* to refer to those instances of direct (reflective) awareness that have as their object — as that of which they make one occurrently aware — an instance of direct (reflective) awareness (cf. Natsoulas, 1989b). But, contrary to any impression that I may have given here, especially with my term *tertiary consciousness*, it is not my intention to bring anything exotic or unusual to the reader's attention in the present article. Actually, I prefer what I am proposing to seem somewhat familiar, yet as needing to be stated. I hope that I am calling to the reader's attention theses that will soon come to seem obvious.

Thus, I am not preparing to treat of mystical, ecstatic, or other so-called "altered" general states of the mind. I shall not speak of the expansion, raising, or elevation of consciousness to a different mode of function in some sense. Although tertiary consciousness consists of awareness of something that is significantly more than what one is aware of in undergoing merely secondary consciousness, tertiary consciousness is not some sort of condition of superior enlightenment as this is commonly understood.

Quite mundane in human life, tertiary consciousness is no more (or less) than the kind of third-order consciousness that takes place in the following highly familiar example:

When one is physically hurt, one is often consciously aware of feeling pain. Being consciously — rather than nonconsciously — aware of feeling pain, one does not *simply undergo a feeling of pain*, which would be a case of "primary consciousness."¹ Nor is one *merely aware of the feeling of pain*, which would be a case of "secondary consciousness." In addition to the primary and secondary "levels" of consciousness, one's occurrent awareness of the feeling of pain is itself a conscious awareness; one is, as well, *aware of being so aware*. This is tertiary consciousness.

When Does Tertiary Consciousness Occur?

In my view, tertiary consciousness does not require a special occasion to take place. It does not require that normal mental processes be superseded. It is not an emergency response. Tertiary consciousness is a quite ordinary dimension of human psychological functioning — as one is not likely to gather from the systematic accounts of consciousness that psychologists have lately been providing us or, for that matter, from how psychologists reply to questions addressed to them about consciousness.

Such questions are being asked of psychologists more and more frequently these days. Everyone wants to know certain basic truths about consciousness, what it is, how it functions, what differences our possessing consciousness makes in our lives. However, present-day psychological thought is inadequate in at least one relevant respect: *it takes a form that is as though tertiary consciousness does not exist*.

The ordinariness of tertiary consciousness is a rare and unexpected claim to find expressed in the psychological literature. After all, some psychologists hold that consciousness in general comes into operation only when habitual behavioral adaptations to present circumstances have proved themselves to be ineffective. Other practitioners of the discipline do admit direct (reflec-

¹Like other mental-occurrence instances, a feeling of pain is no less an awareness for being a feeling. Whenever we have a feeling of pain, whether or not we are aware of having it, we are aware therein of some part of our body. We are, as it were, painfully aware or, better, pain-qualitatively aware of that part of our body (cf. Natsoulas, 1993a).

tive) awareness as part of everyday life and recognize that we are constantly orienting ourselves not only with respect to the environment and our own bodies, but also by consulting what is taking place in our stream of consciousness (cf. Gurwitsch, 1964, p. 415; Natsoulas, 1993a). However, even these more enlightened psychologists have not yet arrived at the realization: *that putting direct (reflective) awareness to use (e.g., as a basis for issuing reports or drawing inferences) requires that the particular instance of direct (reflective) awareness itself be conscious*. Direct (reflective) awareness too, like its object, must be the object of occurrent awareness in such cases.

Certain psychologists, who speak with some confidence on this matter, assure me personally that tertiary consciousness plays little if any role in everyday life. They do not say how they know this to be true, but they seem to believe strongly that it is. One gathers from their statements that they, too, feel that something important is at stake. To reach their conclusion, they are evidently drawing on their own experience, since they do not cite other grounds for their belief. Instead, they ask for evidence to be shown to them that tertiary consciousness is a common phenomenon. They themselves purport to be unacquainted with tertiary consciousness from their own case.

Perhaps they hold against the ordinariness of tertiary consciousness because their own direct (reflective) awareness reaches, as it were, only as high as the tertiary level; thus, they lack awareness of that level, since each level's objects lie on the level just below. Or, much more likely, their immersion in modern psychology, which began as early as when they were just turning twenty years of age, has created in them an aversion to including too much consciousness into the model of the human being that they are engaged in the long-term project of constructing. Also, they may fear that a judgment of inadequate rigor will be passed against their own scientific practice if they introduce into their psychological discourse a larger number of "levels" of consciousness than many of their colleagues consider to be acceptable at this point in the history of their science.

In my view, human beings instantiate not only some kind of consciousness but quite often they instantiate tertiary consciousness. The totality of instantiations of tertiary consciousness includes: *all those occasions when a human being bases his or her behavior (i.e., chooses how to behave based) on something that is mentally occurring to him or her*. For example, the answer to the following question would seem to be obvious: Can one take aspirin for a headache when one is not consciously aware of having a headache?² Therefore, my reply to my skeptical colleagues has been taking more or less the following form:

²One might ingest aspirin against anticipated pain. But, in order to do so, one would have to be aware of expecting pain. If one does expect to feel pain yet does not have direct (reflective) awareness of any mental-occurrence instance that is an instance of this expectation, one will not take aspirin in advance of developing the pain.

Tertiary consciousness amounts to no more than being *consciously* aware firsthand of a mental-occurrence instance. Tertiary consciousness is not an altered general state of the mind, requiring in order to be produced special conditions of mental functioning or the recognition by the individual of special circumstances. Instantiating tertiary consciousness does not require that one's mind shift into a different general operating mode from the one in which we usually find ourselves, that is, the general state of consciousness which we commonly call "consciousness" and which is known also as "the normal waking state."

Regarding this state, see O'Shaughnessy (1972, 1986), as well as the discussion of "consciousness₆" included in Natsoulas (1983) along with discussions of five other ordinary concepts of consciousness as these are defined and their use illustrated in *The Oxford English Dictionary*.

My reply to my skeptical colleagues continues along the following lines:

Surely, you yourself are sometimes *immediately, noninferentially aware of a mental-occurrence instance and, at the same time, you are occurrently aware of being so aware*. In fact, does this not happen to you repeatedly throughout your day. And, it may even happen when you are dreaming. That is, you become consciously aware of certain of your experiences that are a part of the totality of those making up your episode of dreaming. You may take them as dream experiences or you may not, rather as apprehensions of something really going on, but that is a further matter which goes beyond, although it depends on, your having conscious awareness of the dream experiences. Moreover, when you are awake, *do you not take action on the basis of what you are conscious of yourself as directly (reflectively) apprehending, just as you take action on the basis of your conscious perceptual awarenesses?* Your conscious perceptual awarenesses are those of your perceptual awarenesses that you have direct (reflective) awareness of. You would not initiate any of those actions if your relevant direct (reflective) awareness, or your relevant perceptual awareness, were not conscious. *If the respective awareness were not an object of your consciousness, it would be for you as though the object of that awareness were not there or had not occurred.* In this connection, I have often mentioned the example of taking aspirin for a headache, a common enough action. Suppose you are aware of having a headache but your awareness of this state of affairs is not conscious; that is, you are temporarily lacking somehow in any direct (reflective) awareness of your awarenesses. In such an instance, you would not take an aspirin although you are in fact aware of having a headache. Such awarenesses may affect your behavior but, *since you are unaware of them, you cannot act on their basis*, that is, you cannot select actions based on what these awarenesses "assert" to be the case.

Regrettably, what often comes to a psychologist's mind when he or she encounters reference to more than just primary consciousness — more than just, for example, feeling pain, visually experiencing the sun, having a thought about home, wanting to repair an appliance — is a sort of purposive mental activity in which one engages with respect to a part of one's stream of mental-occurrence instances. That is, the alternatives are implicitly taken to be either that one simply has a mental-occurrence instance or that one takes some sort of mental action with respect to it. However, contrary to what may be implied by the use of certain psychological clichés (e.g., "I can have an experience of something without thinking about that experience"), it is not true that sec-

ondary or tertiary consciousness depends on engaging in purposive mental activity. Not even the activity of introspecting (which is, indeed, conducive to secondary and tertiary consciousness) is necessary for secondary or tertiary consciousness to receive instantiation in the stream of consciousness.

In the first main section of this article, in my fourth category of comment, I mentioned the direct (reflective) awareness that takes place upon one's adopting an introspective attitude, and how different theoretical accounts would start to explain the resulting increase in the relative frequency of direct (reflective) awareness. However, I did not mean to suggest that, in order to have direct (reflective) awareness, one must engage in the mental action of adopting an introspective attitude, or in any action whatsoever.

At the same time, I do want to acknowledge that engaging in introspection will, while this activity proceeds, very likely increase the relative frequency of mental-occurrence instances that are objects of direct (reflective) awareness *and are consciously such objects*. After all, a person who is making an effort to be directly (reflectively) aware of his or her mental-occurrence instances, as happens when someone adopts and maintains an introspective attitude, needs to know how he or she is doing. Is he or she succeeding in the effort to be aware of his or her stream of consciousness as it rapidly flows along?

By the way, some patients of clinical psychologists and psychiatrists sometimes report their experiencing, despite their every effort, an inability to keep up with their conscious stream, to fully grasp what is rapidly transpiring there. Other patients describe themselves, in effect, as having direct (reflective) awarenesses of their mental-occurrence instances, but as being unable to remember some of them long enough to say what these mental-occurrence instances were and were about. For discussion of purposive mental activity and introspection as such an activity, see the final main sections of the present article.

Issuing a commentary regarding the present contents of one's stream of experience requires suitable tertiary consciousness to take place as part of the commentary's causal conditions. However, tertiary consciousness cannot be reduced to such a commentary, as psychologists have sometimes suggested. Tertiary consciousness is also instantiated, for example, when one becomes consciously aware of visually experiencing (under any possible description) a tree in the garden, or one becomes consciously aware of thinking about the rain that is now falling on London, or one becomes consciously aware of imagining a visit to the Louvre, or one becomes consciously aware of wishing that one were in Italy instead. In such cases, (a) one is not necessarily engaged in the activity of commenting on one's mental life, (b) one may merely take quick notice of something which takes place in one's stream of consciousness, and (c) this may be, as it were, a self-conscious notice, a

notice of which one is aware firsthand. As well, self-conscious notice occurs as part of one's activity of commenting on one's present experiences. However, to comment on a particular present experience, one must take self-conscious notice of it first.³

Conscious Awareness

In psychology, the phrase *conscious awareness* is a familiar one. Perhaps, in using it, psychologists intend to do the obvious, that is, to distinguish the kind of awareness that they are speaking of. Thus, it is conscious awareness that they have in mind; it is not nonconscious awareness; it is awareness of which one is directly (reflective) aware. Or, they may want to ensure that they are being correctly understood as exercising a certain concept of awareness, rather than a different one. For example, it is not just someone's having knowledge of a certain state of affairs that the psychologists seek to convey, but the individual's being occurrently aware of that state of affairs. Thus, the awareness is conscious, it takes place, so to speak, "in" consciousness, rather than its being merely dispositional.

What do psychologists mean when, for example, they say that their research subjects, in an experiment or in everyday life, are "consciously aware" of forming an intention to behave in a certain manner? Surely, they do not intend to communicate that their subjects are aware simply of their intention to act, that is, without the subjects' having any apprehension of so being. The psychologist's use of *consciously* here would seem to rule out the latter meaning — and, to "rule in" tertiary consciousness.

The phrase *conscious awareness* can also be applied, quite properly, to all those cases that individually include both primary consciousness and a corresponding secondary consciousness, whether or not such cases also involve tertiary consciousness. For example, while you are reading this article, you may be not only aware of the conversation that is going on in the office next door to yours. You may also have awareness of your auditory experience of the conversation. Therefore, your auditory experience of the conversation is a conscious awareness. And this is the case whether or not you are, as well, consciously aware of your auditory experience. That you are having direct (reflective) awareness of your auditory experience means, just on its own,

³As well, one may of course make comments on past experiences and on experiences one expects to have. Commenting on past or future experiences does not require that one take, *per impossibile*, self-conscious notice of those experiences. But it does depend on being aware of them now, by remembering them or consciously having thoughts about their future occurrence. Whenever instead one is only nonconsciously aware of certain particular experiences, however that awareness may take place (e.g., memory, anticipation), one will issue no comment about them at all.

that your auditory experience of the conversation is a case of conscious awareness. Your auditory experience is not nonconscious awareness, as it would be if you were not directly (reflectively) aware of it.

Therefore, I also find it useful to speak of someone's being "simply aware" of something, meaning that the individual's awareness of this object (be it mental or nonmental) is not itself an object of direct (reflective) awareness. For this purpose, the term *simple awareness* is applicable at both the primary and secondary "levels." Also, *nonconscious awareness* can serve as a suitable synonym for *simple awareness*. At either "level," a simple or nonconscious awareness would be a mental-occurrence instance that is an awareness of something, or as though of something, but the mental-occurrence instance would not be itself an object of direct (reflective) awareness, as it would if it was a conscious awareness.

The phrase "as though of something," which I used just above, acknowledges that some mental-occurrence instances possess the property of intentionality although that which, let us say, they "would be" about has no existence; that is, their apparent object does not exist, has not existed, and will not exist. I have already mentioned such mental-occurrence instances in one of my categories of comment in the first main section. Some mental-occurrence instances give awareness of *something that is merely apparent*. About these instances of awareness, it is better to say that they do not have an object. Although they possess the intrinsic property of intentionality, they do not possess the external relational property of aboutness. Aboutness requires that there be a second term, which serves to satisfy the relation that aboutness is.⁴

Keeping the Third "Level" in Mind

Colleagues who prefer a more circumscribed strategy than my own (about which see next section) in the effort to develop a scientific understanding of consciousness are right in at least one respect. As these colleagues would expect, students to whom I broach the topic of tertiary consciousness do experience some passing difficulty in keeping the extra "level" of consciousness discursively in mind.

⁴I do not address the contrary thesis here, namely: *that any occurrent awareness that is rightly said not to possess an actual object is, nevertheless, an awareness of a certain real context for its apparent object*. For example, when one dreams about an unreal creature, one may erroneously be aware of this creature as existing in the world at some vague or precise location. If, instead, the dream is lucid, if one takes neither the creature nor its apparent location as real, then one is aware of the creature as something of which one is dreaming or imagining. Thus, an awareness without an actual object always gives, anyway, awareness of an actual context. However deficient in aboutness, an awareness has reference to something real, be it merely one's imagining what one is aware of. I shall elsewhere consider this thesis.

However, encouragingly (for a reason that I shall explain), the students take for granted: *that any instance of direct (reflective) awareness is consciously such an instance*. That is, they “naturally” presume that, when we are directly (reflectively) aware of a mental-occurrence instance, we are necessarily aware of so being. After all, they will say, we are speaking of a “conscious” mental-occurrence instance, are we not? Thus, they happen to be in agreement with Freud, who would have asserted as follows (see Natsoulas, 1989a): “A direct (reflective) awareness of which its possessor is completely unaware is not a consciousness that deserves any discussion at all” (cf. Freud, 1915/1957, p. 170).

In the students’ not closely considered opinion, it is all one and the same mental happening:

- (a) undergoing a mental-occurrence instance,
 - (b) being directly (reflectively) aware of the mental-occurrence instance,
- and
- (c) being occurrently aware that one is so.

The students’ view resembles that of Brentano, who wrote as follows concerning the inner structure of any auditory experience — after systematically rejecting (as James [1890/1950] and Searle [1989, 1990, 1992] did later) all nonconscious mental-occurrence instances (contrast Armstrong [1968, pp. 113–115]):

In the same mental phenomenon in which the sound is present to our minds we simultaneously apprehend the mental phenomenon itself. What is more, we apprehend it in accordance with its dual nature insofar as it has the sound within it, and insofar as it has itself as content at the same time. (Brentano, 1911/1973, p. 127; cf. Woodruff Smith, 1986, 1989)

Although I do not agree with the students (or with Brentano) on the point that direct (reflective) awareness entails awareness of it itself (any more than perceptual awareness entails awareness of it itself), I find encouraging the presence of this presumption in the students’ thinking. With just a little help, the students are able to arrive at an easy familiarity with the notion of tertiary consciousness *because the notion is already implicit in their thinking*.

In order to draw the students’ attention to tertiary consciousness as a psychological problem, I ask them to imagine the *absence* of tertiary consciousness in the following case and to consider the consequences of this absence. I ask them to imagine all of the following facts to obtain simultaneously in the case of someone who is not now engaged in introspection.

1. Thoughts are fluently and quite normally passing through the person’s mind throughout a certain interval of time.
2. The person has awareness of some of these thoughts when they occur.

3. Of the remaining thoughts that populate this interval, he or she is not at all aware.

4. The person is completely unaware of having any awareness of any of these thoughts: that is, the direct (reflective) awareness the person does have of some of his or her thoughts is fully nonconscious; it is not itself an object of the person's awareness.

In other words, all direct (reflective) awarenesses in this particular example are simple (nonconscious) awarenesses; none is a conscious awareness; no tertiary consciousness is involved in the example.

The students are able and willing to imagine the above case, despite their implicit presumption that every direct (reflective) awareness is conscious. The students do not, as Brentano did, reject nonconscious mental-occurrence instances from the start. Indeed, Brentano's own student Freud has had lasting effects on our ordinary thought.

While he was a student at the University of Vienna, Freud took at least five elective courses in philosophy from Brentano. However, Freud developed a conception of the mind that is very different from his teacher's, a conception that prominently and famously includes nonconscious mental-occurrence instances. I have elsewhere published a kind of defense of Freud against Searle (1989, 1990), who has been insisting in recent years that all purported nonconscious mental-occurrence instances that actually take place are nonmental. Unlike conscious mental-occurrence instances, so-called nonconscious mental-occurrence instances are supposed to be purely physiological according to Searle; they possess no intrinsic mental features, such as intentionality or qualitativeness (Natsoulas, 1992; cf. Natsoulas, 1995).

I then point out to the students that, if the person were asked to report on the thoughts that he or she had during that interval, the person could not do it. First, the person would not be in a position to report, of course, those thoughts of which he or she was unaware. I emphasize to the students, "How can one report the occurrence of an event of which one is not aware?" (cf. Natsoulas, 1993a). Second, I explain that the person also could not report any of the remaining thoughts that took place during the same interval; although the person did apprehend those thoughts when those thoughts occurred, he or she was, *ex hypothesi*, completely unaware of so doing. I ask, "How can one report the occurrence of an event of which one is not consciously aware?" (cf. Natsoulas, 1993a). To have nonconscious awareness of any event cannot serve as a basis for conscious, deliberate behavior such as reporting that the event occurred.

In addition, I ask the students to compare the above case, which they have imagined for me, with an analogous case in which secondary consciousness is quite absent: namely, a person's seeing a tree in the garden without any awareness of the visual experiences which are an essential part of the process

of seeing the tree. The person's merely undergoing such experiences, of which he or she is completely unaware (although the experiences are themselves awarenesses), would not make it possible for him or her to report the tree's presence. I conclude,

Just as we cannot report something in the environment of which we are no more than simply aware, so we cannot report a thought of which we are aware in the absence of the appropriate tertiary consciousness.

Conceptual Development

Yet, the students' reactions cause me to ponder the significance of their simultaneously (a) countenancing nonconscious awareness, and (b) presuming that to be aware of something, whether or not it is a mental-occurrence instance, is to be consciously aware of it. On the one hand, the implication appears to be that we can have occurrent awareness without its involving any higher-order awareness. On the other hand, being occurrently aware of something, say, in the environment, is a complex of awareness, including being aware that we are (secondary consciousness) and being consciously so aware (tertiary consciousness).

This contradiction, of which I believe the students are not guilty (see below), would be a consequence of our being in the midst of a process of conceptual bifurcation, so to speak, with respect to our concept of occurrent awareness or consciousness (see "consciousness₃" in Natsoulas, 1983). This process starts from (a) a concept of consciousness that, owing to its original meaning and source, refers to a complex of awarenesses (to be explained). And this process of conceptual change is on its way to the formation of (b) a concept of consciousness, which is now still getting pared down, that would refer simply to the having of occurrent awareness of something or as though of something in a completely nonconscious way — a nonconscious awareness. That is, after the conceptual paring down, the remaining awareness that the new concept would refer to would be an apprehension of something or as though of something and nothing about the apprehending itself. In the way of awareness, nothing more that would be essential to its qualifying as such would belong to an instance of this kind of consciousness or would be attached to or associated with it.

The students are either contradicting themselves, which I very much doubt, or they have not participated as yet in the ongoing process of conceptual bifurcation. That is, they are not conceiving of nonconscious awareness in the pared-down form that I have suggested as the outcome of the respective process of conceptual development. *When they think of nonconscious awareness, they conceive of it as being like conscious awareness except for one*

thing: the one whose awareness a nonconscious awareness is is not the one who is conscious of the awareness.

But who else could it be? Freud argued repeatedly against the possibility of a “second consciousness” within the same individual. Such a consciousness was not what he had in mind when he posited the unconscious. A secondary consciousness (cf. James, 1890/1950) is not worth talking about, Freud insisted, since it is, purportedly, a consciousness of which its owner is not aware. The owner of an unconscious wish is not directly (reflectively) aware of this wish, but an unconscious wish does not belong to another consciousness, that is, a second owner or subject within the same person.

The reason that the students agree with Freud about the existence of non-conscious awareness is *not* because they have acquired the beliefs by means of which to think of mental-occurrence instances that are entirely about something else, that are not themselves objects of direct (reflective) awareness. Rather, they find an older, more familiar notion applicable, a notion of consciousness as being quite transparent: that is, occurrent awareness always takes place in a fully self-conscious sort of way, but there may be more than one consciousness per human being, that is, more than one subject of consciousness.

Is Tertiary Consciousness an Undesirable Complication?

The following are some of my theses concerning tertiary consciousness. Should they be pursued at this time or do they prematurely complicate our effort to understand consciousness?

1. In anyone who expresses certainty that he or she possesses a mental life, we will most likely find an admission, explicit or implicit, that tertiary consciousness exists.
2. In the absence of tertiary consciousness, we would not know firsthand that we had immediate awareness of our mental-occurrence instances, and not even of the latter's existence.
3. Reporting that a certain mental-occurrence instance just took place in one, normally expresses an awareness of one's having direct (reflective) awareness of that mental-occurrence instance. On this third point, I have elsewhere stated,

In order to report to someone that you are seeing X, it is necessary that you choose an appropriate utterance or other communicative behavior, one that corresponds to the content of your [direct(reflective) awareness] of seeing X. And [making this choice] requires a third-order consciousness, which allows you to match your communicative behavior to what you are conscious of having [direct (reflective) awareness] of. (Natsoulas, 1993a, pp. 330)

Some readers will consider my attention to tertiary consciousness as adding, regrettably, another large complication to the general discussion of an already complex subject matter. In reaction to the idea of tertiary consciousness, these readers will think, I expect, something along the following lines:

Owing to our discipline's prolonged avoidance of consciousness as a scientific topic of inquiry, we have rather a large job ahead of us. It is only recently, after decades of systematic professional suppression (see, e.g., Jaynes, 1976, p. 15), that psychologists have finally managed to get started in the effort to formulate some kind of preliminary account of consciousness. Our renewed effort is made doubly difficult by the lately muted yet persisting clamor against consciousness with which we have had to live our entire scientific career. And now, a consciousness-friendly author wants us to add a third level to our nascent understanding! This third level will, more than likely, contribute to the puzzlement in which we already find ourselves immersed. Even worse, including a third level in our discussions of consciousness may result in defections from our common effort by some of our colleagues whose assistance we so badly need. Psychologists control their colleagues' behavior partially by deriding views which run against the grain of their own thinking (cf. Benjamin, 1977; Gross, 1977). As unprofessional as this kind of conduct surely is, the idea of conscious awareness at the third level will lend itself to some psychologists' exclusionary aims, and will therefore harm the future of consciousness studies. Consciousness is a difficult topic that should be, for some time to come, simplified wherever this is possible. Some distortion of a true picture can be a virtue, can sometimes add to the picture's clarity. Later on, we will be in a better position to address consciousness in all of its complex dimensions.

These readers will prefer that, at the present time, discussions of consciousness be restricted entirely to the primary and secondary "levels," until we have achieved a firmer grasp of "the problem."

The above basically exclusionary strategy may be useful for some purposes. Nevertheless, I shall proceed with discussion of tertiary consciousness here and elsewhere. For, to say the least, I find dubious the scientific value of what might be called "thought timing." I mean by "thought timing" the strategy expressible as follows: "Let us not begin to think about this until we have first thought enough about that." Or, even worse, "Let us not make available the thinking that we have already done along these lines, for fear of alienating our constituency or audience, which prefers a greater simplicity of psychological thought."

What worthy purpose is served by such caution? After all, psychologists know that complexity may attract interest, that being puzzled about something is not necessarily dysphoric for human beings. In fact, human beings sometimes seek to be puzzled for the pleasures afforded by the process of gradually extricating themselves from that state. And for all that we know in advance, a little greater complexity in the discussion of consciousness at the present time may have the effect of bringing us somewhat nearer to the truths we all seek, nearer than we would come to them on the pretense of knowing that a more basic problem should be solved first.

When we declare a topic that can be investigated to be a “premature” one for scientific study — as psychologists will often advise their students and colleagues concerning a potential research topic — we are claiming to possess specific knowledge *prior* to investigation. This claim is inconsistent with the kind of empirical science that psychologists have all along purported to be practicing. In fact, it may qualify as antiscientific. Embarrassingly, even the standard of “good science” has been used by psychologists (and by others no doubt) in the pursuit of antiscientific ends.

Other Alternatives Pertaining to Direct (Reflective) Awareness

In the first main section of this article, I was tempted to say that all of us, without exception, regularly undergo direct (reflective) awareness. However, I explicitly left the possibility open that some unfortunate human beings are completely “mind-blind.” They may be congenitally “mind-blind,” or as a consequence of brain injury or malfunction. If a human being is completely “mind-blind,” this means:

that all of his or her mental-occurrence instances take place without their being objects of direct (reflective) awareness at any time; all of this individual’s mental-occurrence instances are instances of “sciousness” rather than instances of “con-sciousness” (see next paragraph).

Perhaps we are all mind-blind before a certain point in our lives, a point before or after our being born.

Which leads me to mention that the prominent theoretical neuropsychologist Donald O. Hebb (1968, 1969, 1972) proposed that we are all mind-blind throughout our lives in exactly the above sense, that there is no such thing as direct (reflective) awareness. Relevantly, James (1890/1950) had already written (quoted below) regarding this extreme “Sciousness Hypothesis,” as I have labeled it after James’s passing term *sciousness* for those basic durational components of the stream of thought that are not objects of direct (reflective) awareness. See Natsoulas (1996a, 1996b) for criticism of the Sciousness Hypothesis, according to which every one of our mental-occurrence instances are instances of sciousness, rather than being, some of them, instances of con-sciousness — the latter being James’s hyphenated term in passing for basic durational components of the stream of thought that are conscious awarenesses. Also, criticism of Hebb’s position can be found in Natsoulas (1983), in the section about the ordinary concept of “consciousness₄.”

In “Chapter X. The Consciousness of Self,” James briefly contemplated the possibility that none of us has immediate access to any part of our mental

life; only certain events in our body are open to us in that sort of way. James (1890/1950) concluded,

Speculations like this traverse common-sense; and not only do they traverse common sense (which in philosophy is no insuperable objection) but they contradict the fundamental assumption of every philosophic school. Spiritualists, transcendentalists, and empiricists alike admit in us a continual direct perception of the thinking activity in the concrete. However they may otherwise disagree, they vie with each other in the cordiality of their recognition of our *thoughts* as the one sort of existent which skepticism cannot touch. I will therefore treat the last few pages as a parenthetical digression, and from now to the end of the volume revert to the path of common-sense again. I mean by this that I will continue to assume (as I have assumed all along, especially in the last chapter [i.e., "Chapter IX. The Stream of Thought"]) a direct awareness of the process of our thinking as such, simply insisting on the fact that it is an even more inward and subtle phenomenon than most of us suppose. (pp. 304-305)

Although the arguments in its favor are not convincing, I should make some mention as well of a certain prominent conception of direct (reflective) awareness. According to this radical behaviorist conception, direct (reflective) awareness comes into existence as a result of verbal operant conditioning (Skinner, 1953, 1957, 1976). Thus, all of us lack direct (reflective) awareness until the verbal community conditions us to emit — on the occasion of certain "private events" (e.g., feelings, instances of seeing) — certain descriptive utterances. These utterances are not expressions of direct (reflective) awareness; rather, they are proposed to be themselves the direct (reflective) awarenesses, to be themselves a kind of consciousness. To emit verbal behavior is equivalent to being aware of that which the behavior may describe. Well-founded criticism of the radical behaviorist account can be found, I believe, in some of my previous articles (e.g., Natsoulas, 1986).

A Use of Tertiary Consciousness in the Explanation of Purposive Mental Activity

If (a) tertiary consciousness is an essential ingredient of the psychological process that David M. Armstrong (1968) called "introspection" and (b) if it is also the case, as Armstrong argued, that "introspection" is necessary in all cases of purposive mental activity, then tertiary consciousness would be a factor in human existence of far greater importance than psychologists have so far surmised.

In its journey to the truth about the mind, the science of psychology may have again suffered a radical deflection. Those methodological strictures which psychologists have been applying assiduously to each other's thought and practice have, no doubt, served some purpose; but they have not functioned to prevent our field from falling into another major, wide-spread error

in the understanding of human psychological functioning. Rather than protecting us from misdirection, these strictures may once again be the very factor that is largely responsible for the present error.

Without listing such past errors, let me say that they should have taught us not to measure our science by its methodologies. The proper measure of any science is the degree of enlightenment that it brings to the scientists themselves and to other people. The proprieties, the correct behaviors that practitioners of a science demand of each other, cannot properly serve as the basis for evaluating the science — even if these demands were not as variously motivated as an objective observer would judge them to be.

The basic evaluative question must come down to this: *what the science of psychology has achieved and what it has failed to achieve as far as knowledge of its subject matter is concerned*. After all, any investment strategy — however elegant, intricate, or well-informed it may be — must be evaluated with reference to its return, not by examination of the justifications and intentions of those who are deploying the strategy. Nobody is likely to reply that psychology, like a tribal ritual or game, should be pursued for its own sake, or for the sake of the members of the profession and their families, as distinct from the advances in knowledge that the science may yield.

The phrase *purposive mental activity*, which I used just above, refers to the initiation and control of a series of mental happenings by the individual whose mental happenings they are for the purpose of achieving a particular mental goal. An example of purposive mental activity is the performing of mathematical calculations in one's head. Another example is the familiar effort of trying, without external aids, to recall a name, a word, or a number that has been forgotten.

In both of these and many other cases of purposive mental activity, what Armstrong called "introspection" (see next subsection) surely must be involved. And whenever we put our minds to use, in the sense of working on a problem mentally, we also instantiate tertiary consciousness if I am right in the claim that the "introspection" which, according to Armstrong, is required by purposive mental activity necessarily involves tertiary consciousness.

However, Armstrong also proposed:

- (a) that nonconscious, as well as conscious, purposive mental activity takes place, and
- (b) that what qualifies a purposive mental activity as nonconscious, whenever it is nonconscious, is the absence of tertiary consciousness from the activity.

At the same time, even as he proffered it, Armstrong (1968, p. 64) admitted to some uncertainty regarding the adequacy of his indicated account of non-conscious purposive mental activity.

And I have my own deep doubts regarding this part of Armstrong's account of purposive mental activity. In the next main section, I take issue with Armstrong's notion of nonconscious purposive mental activity and then I mention, based on William James's thinking in *The Principles*, two alternative interpretations of those purposive mental activities which Armstrong proposed occur nonconsciously. These alternative interpretations may save Armstrong from having to explain: *how there can be, after all, purposive mental activity in the complete absence of tertiary consciousness.*

"Introspection"

In *A Materialist Theory of the Mind*, Armstrong argued that, in order for purposive mental activity to proceed, it requires that information be acquired regarding how the mental activity is progressing toward its goal. The goal of an instance of purposive mental activity is represented mentally in the intention (the mental cause) that initiated the particular instance of mental activity and continues to sustain this activity until its goal is reached or until the particular instance of purposive mental activity is terminated for a different reason. Upon goal achievement, certain relevant information is fed back to the intention, and has the effect of the intention's being turned off, rendered no longer operative. The informational feedback now, for the first time, matches the ultimate goal represented by the intention's content.

Performing a role analogous to the role of perception in the guidance of purposive behavior, "introspection" is proposed to be the source of the feedback information that Armstrong argued is needed for a purposive mental activity to reach its goal. While the particular purposive mental activity is still underway, information pertaining to the activity's progress toward the intention's goal may contribute to modifications in the properties of the controlling intention. This information about the progress made so far can result thereby in the occurrence, instead, of alternatives to the individual mental happenings that would have otherwise made up the rest of the particular instance of mental activity.

Referring to this information concerning the mental activity's progress, Armstrong (1968) stated, "Without introspection there could be no purposive mental activity" (p. 327). One wants to know at once, among other things, what Armstrong meant by "introspection." About anything called "introspection," one expects it to be said or implied that direct (reflective) awareness is an important part of the process. However, there is the possibility that someone might, ingeniously somehow, construe "introspection" so as to include in the process only mental-occurrence instances that belong to the category of "sciousness" [see the earlier subsection titled "Other Alternatives Pertaining to Direct (Reflective) Awareness"].

An account of “introspection” in terms of sciousness alone should be, at the least, difficult to bring off because such an account, if it actually managed to be consistent, would allow, by definition, only mental-occurrence instances that are completely outwardly directed (i.e., on the environment, behavior, or body outside the brain) rather than directed around upon the mind itself. Try treating theoretically of the following general case in terms of instances of sciousness alone; you will quickly discover the difficulties such an account perforce encounters. Here, in abbreviated form, is how I have presented these unavoidable problems to students in my classes:

How can you know that a certain behavior of yours is now occurring, unless you not only perceive the behavior and grasp that it is yours, *but are aware as well of your perceiving it?* If you reply, quite reasonably, that another way in which you can know of your behavior is *by the very act of your doing it*, thus not necessarily by your perceiving it, then you will have to explain, with reference to this kind of knowing from the inside: *how you know, in the absence of all direct (reflective) awareness, that you are doing the behavior.* I would agree that your performing a behavior — in contrast to the corresponding response of yours being evoked by stimulation — involves your having awareness of the behavior that is intrinsic to performing the behavior. However, in my view, your having awareness of the behavior from the inside would be itself an instance of direct (reflective) awareness. That is, it would not provide a counterexample to my main point. Accordingly, one would be aware of one's behavior before it occurred: by having occurrent awareness of an early, internal, mental aspect of the total process that produces the behavior. Also, as brought out earlier, your knowing of your behavior's occurrence in this way would depend on whether you also apprehended (i.e., had tertiary consciousness of) the respective direct (reflective) awareness, which took place as part of the behavior-producing process.

A theorist who desires to debunk direct (reflective) awareness may speak of “introspection” anyway, although he or she has in mind a process entirely free of any direct (reflective) awareness. Hebb (1968, 1969, 1972) was such a theorist. He proposed that the misnamed and misunderstood process of “introspection” actually is an inferential process which uses for its premises somehow — this part was not explained, although direct (reflective) awareness was explicitly ruled out — the propositional contents of exteroceptive, proprioceptive, or interoceptive perceptual awarenesses. It was proposed that this inferential process arrives at conclusions regarding the behavioral causal efficacy of particular mental-occurrence instances that, as is supposed to be the case for all mental-occurrence instances, cannot be apprehended except *in absentia*, that is, in the form of thoughts about them: just as one has thoughts about an event long after the event has taken place.

However, without direct (reflective) awareness of one or more of the mental-occurrence instances involved, it is dubious whether this purely indirect “introspective” process, which does not include any kind of noninferential awareness except the perceptual, can work to produce the results that Hebb attributed to it. What I have foremost in my mind here are those very

perceptual awarenesses that are supposed to supply premises to the processes by which one reasons to conclusions concerning mental causes. Thus, I am wondering as follows:

How does the individual know of the occurrence to him or her of these perceptual awarenesses, if, as is being proposed, it is not by means of direct (reflective) awareness that he or she knows? Does not the individual have to apprehend mentally any perceptual awareness that effectively provides him or her with evidence by means of which to reason? Even if a piece of evidence were to be delivered to the individual in the form of his or her having a spontaneous factual thought, would not the individual have to be occurrently aware of this thought in order to make use of the evidence that the thought represented?

Secondary Consciousness

Now consider in contrast Armstrong's very different account of "introspection" according to which noninferential awareness is crucially involved in every instance of it. Given the topic of this article, the relevant question to raise becomes:

whether tertiary consciousness too is an essential ingredient of "introspection." Also, can what Armstrong stated regarding "introspection" be justifiably asserted about tertiary consciousness as well? Is purposive mental activity impossible in the complete absence of tertiary consciousness? Will "subliminal introspection," as Armstrong called it (see further on), suffice in some cases at least of purposive mental activity?

Purposive mental activity is like purposive behavior with respect to requiring for its success the acquisition of information concerning its own progress. Purposive behavior requires, according to Armstrong (1968), *perceptual feedback* concerning its progress. For example:

Now, if I am to bring off this feat, things like the shut door, the obstructing persons, the traffic, must all be things that I become aware of, and this awareness must have the effect of adjusting my behaviour so that despite the obstacles, I still get to the bar. (p. 139)

The feedback in the case of purposive mental activity is, as one would expect, *nonperceptual*. The feedback takes the form of direct (reflective) awareness of some of the mental-occurrence instances that constitute the particular purposive mental activity. When Armstrong speaks of "introspection" as the source of the feedback required, he means "a mental event having as its (intentional) object other mental happenings that form part of the same mind" (Armstrong, 1968, p. 323).

Armstrong is referring here to secondary consciousness, but it is clear from what he says that he would construe tertiary consciousness analogously. Also, Armstrong is expressing his conviction: *that no mental-occurrence instance can*

give awareness of itself; it can only give awareness of something else. Direct (reflective) awareness requires, according to Armstrong, that an additional mental-occurrence instance occur, in addition to the one that is the object of direct (reflective) awareness. It is this additional mental-occurrence instance that is the direct (reflective) awareness. In Armstrong's view, tertiary consciousness would require a further mental-occurrence instance, which would have the direct (reflective) awareness just mentioned as its object. However, no infinite regress would thus be started, for a mental-occurrence instance that instantiates tertiary consciousness need not be itself an object of direct (reflective) awareness. This is true at all "levels" according to Armstrong's conception of consciousness.

Elsewhere, I have written critically about Armstrong's (and other authors') grounds for holding that the direct (reflective) awareness of a mental-occurrence instance must be a distinct existence from the mental-occurrence instance itself (Natsoulas, 1989a). A different, intrinsic view of direct (reflective) awareness has been well argued by the American phenomenologist David Woodruff Smith in *The Circle of Acquaintance* (1989). Intrinsic accounts of secondary and tertiary consciousness have also been defended by Brentano, whom I relevantly mentioned in an earlier subsection titled "Is Tertiary Consciousness an Undesirable Complication?"

Introspection as a Purposive Mental Activity

According to Armstrong, the word *introspection* may suitably be used to refer, as well, to mere "reflex awareness" of what is taking place in one's mind. Reflex awareness is the spontaneous direct (reflective) awareness of one or more mental-occurrence instances and occurs without any accompanying self-consciousness. That is, it is direct (reflective) awareness in the absence of what I am calling tertiary consciousness. Thus, in Armstrong's sense, both conscious "introspection" and nonconscious "introspection" take place.

My own preference is to reserve the term *introspection* for a distinct kind of purposive mental activity. I would reserve the term for the mental activity of "introspecting" in which we sometimes deliberately engage. Introspection is, as I see it, the process that is involved in, as Armstrong (1968) describes, "self-consciously trying to scrutinize what goes on from moment to moment in one's mind" (p. 93; cf. Armstrong, 1984, p. 120). Introspection, or introspecting, is something that we mentally do, not something that happens to us, as is the case for reflex awareness. Concerning the purposive mental activity of introspecting, I would say the following, making use of some of Armstrong's own notions:

Introspection is initiated and sustained by an intention which may be called an "introspective intention." The goal that is represented in an introspective intention is, most

likely, that the individual undergo, for a certain period of time, as many mental-occurrence instances as possible that are objects of direct (reflective) awareness. By having this intention, the individual would cause to occur a great deal of direct (reflective) awareness or, which is the same thing, a great many more conscious mental-occurrence instances than nonconscious mental-occurrence instances. The intention's more specific goal may be, among others, either one of the following two:

(a) to undergo a preponderance of mental-occurrence instances that are conscious, as opposed to nonconscious, in order to be more fully conscious of one's mental life, or

(b) not to fail to be aware of any mental-occurrence instance that takes place in oneself within the temporal extent of one's introspecting, to catch, as it were, every one of them in order not to miss any of those among them that fall under a certain description (e.g., how I really feel about her).

Notice that the feedback involved in executing the purposive mental activity of introspecting must include being occurrently aware of having direct (reflective) awareness (i.e., tertiary consciousness). For, as stated, the introspective intention in force has an interval of direct (reflective) awareness as its proximal goal. Simply to have such awareness of mental-occurrence instances, however many of these may be such objects, cannot satisfy the intention's goal. Also, the individual needs to know he or she is so aware, and needs to know this frequently.

Purposive Mental Activity

In order that a purposive mental activity be ensured of achieving its goal, mental feedback is repeatedly necessary regarding the stage that the activity has reached and its outcome so far. Given such information, the direction of purposive mental activity, analogously to the direction of purposive behavior, can be modified appropriately if it appears that the mental activity is not on course. "Only so can we adjust mental behaviour to mental circumstances" (Armstrong, 1968, p. 327).

In the case of some kinds of purposive mental activity (e.g., mathematical calculations in one's head), the result achieved at each stage of progress in the activity affects, through feedback, the intention that governs the particular mental activity; and so, the content of direct (reflective) awareness determines the next stage of the mental activity, or which further mental-occurrence instances will take place next.

In the case of still other kinds of purposive mental activity, various behaviors that might be executed with reference to a pending or present external situation, are imagined for the purpose of gauging which one of them will work the best if it is actually performed. Of course, direct (reflective) awareness is necessary in such cases as well. For one thing, in order to evaluate the imagined outcomes of the alternative behaviors, one must have direct (reflective) awareness of the mental-occurrence instances that present those

situational outcomes. That is, one must be in a mental position to think something along these lines: "This course of action, which I am now imagining, is superior to the courses of action that I have previously imagined."

Armstrong's feedback requirement for purposive mental activity may seem to entail that every purposive mental activity is conscious. This may seem to follow simply because for a mental activity to be conscious, by one common meaning of this word, is for the activity, or at least some components of it, to be the objects of direct (reflective) awareness. Similarly, it may be thought that what has lately been called the "monitoring" of mental activity cannot take place nonconsciously, for the reason that "monitoring" perforce involves direct (reflective) awareness. Whichever items are apprehended in the process of "monitoring" are therein made conscious. In order to argue that "monitoring" can proceed nonconsciously, one has to distinguish the mental activity from the items that the activity "monitors." These items may be rendered conscious even as the activity that renders them conscious remains itself nonconscious, remains not an object of direct (reflective) awareness. Analogously, one may have perceptual awareness of parts of the environment or body without any awareness of the activity of perceiving that produces that perceptual awareness. If so, this would be a case exclusively of what I have been calling "primary consciousness."

"Subliminal Introspection"

Continuing the same line of thought, one might think that to propose the occurrence of nonconscious purposive mental activity, as Armstrong did, would be to imply either (a) the absence of all direct (reflective) awareness in connection with such activity, or (b) the absence of direct (reflective) awareness that apprehends any part of the purposive mental activity itself. However, according to Armstrong: *the consciousness involved in some purposive mental activity — like the perceptual consciousness involved in some cases of responding to environmental items — may be nonconscious, thus qualifying this purposive mental activity as nonconscious.* Armstrong (1968) wrote,

Suppose, then, that on a particular occasion we are aware of a particular mental state, but suppose that this awareness is not linked up very closely with the rest of our mental life. Suppose, that is, that we are introspectively aware, but unaware of that introspective awareness. (We might call it "subliminal introspection.") Such "unconscious self-consciousness" might provide the feedback required for teleological mental activity that goes on without our being aware of it. (p. 164)

Thus, the context in which Armstrong called, in effect, our attention to tertiary consciousness (though not under that name) were instances of purposive mental activity *that he proposed proceed nonconsciously*: "On occasion,

we can solve quite complex problems during sleep, or while our mind seems to be otherwise occupied" (Armstrong, 1968, p. 164). As can be seen above, it is tertiary consciousness, not secondary consciousness, that is absent, according to Armstrong, in the case of nonconscious purposive mental activity.

Therefore, it would seem to follow that there is no truly nonconscious purposive mental activity. "There must be some form of self-consciousness, in however unselfconscious a form" (Armstrong, 1968, p. 163). What is called nonconscious purposive mental activity is actually conscious, albeit to a truncated degree. That is, it is not as fully conscious as conscious purposive mental activity is. Missing from nonconscious purposive mental activity is tertiary consciousness.

A More Consistent Account of Purposive Mental Activity

As we have seen, Armstrong spoke of "subliminal introspection" (his quotation marks). Later, he seemed to suggest that this level of secondary consciousness alone is normally required by purposive mental activity. He stated, "This does not imply that purposive mental activity demands a highly self-conscious introspective scrutiny. Something far less may be, and normally is, all that is required" (Armstrong, 1968, p. 163). In cases of nonconscious purposive mental activity, Armstrong seems to be saying, a kind of "introspection" goes on anyway as part of that activity, a kind of "introspection" that is not conscious.

The Necessity of Tertiary Consciousness

Could this be right from Armstrong's own perspective? One wonders about this when Armstrong (1968) writes, "Only if we do become so aware will we know what to do next" (p. 327). Again, he is referring to purposive mental activity, and the need for us to remain abreast of this activity as it proceeds, so that its next stage can be determined by the results of its preceding stage. This is supposed to be mediated by consciousness. Armstrong is implying:

We choose what to do next mentally depending on what we have "introspected" to be the case so far. We choose our next mental action on the basis of our direct (reflective) awareness of the outcome of our previous mental action. We choose on the basis of information that is provided by direct (reflective) awareness.

If this is correct, if this is how all purposive mental activity works, then tertiary consciousness would seem to be essential to all purposive mental activity. As I have already argued: *to choose what to do next on the basis of something that one is aware of requires that this awareness be conscious, that this awareness be an object of direct (reflective) awareness.* If the awareness is not an

object of direct (reflective) awareness, then it will be as though one were not aware of what one was aware of and that this object of awareness was not present or did not occur at the time.

This reasoning applies to both of the following:

(a) Whenever an awareness is an instance of primary consciousness, secondary consciousness directed on that awareness is necessary in order for an action to be based on the primary awareness.

(b) Whenever the awareness is an instance of secondary consciousness, tertiary consciousness directed on that awareness is necessary in order for an action to be based on the secondary awareness.

In all instances of purposive mental activity, according to Armstrong, the required feedback information is provided by secondary consciousness, that is, by direct (reflective) awareness of some of the mental happenings that constitute the respective instance of purposive mental activity. I suggest: *use of this information in the process of choosing which action to perform next requires that the direct (reflective) awareness that is providing the information be itself conscious.*

In Place of "Subliminal Introspection"

But does not the latter conception of purposive mental activity rule out nonconscious purposive mental activity, that is, the solving of "quite complex problems during sleep or when the mind is otherwise occupied?" If such cases are not to be ruled out, an explanation is needed for them that is different from the explanation, in terms of "subliminal introspection," that Armstrong proposed but was unsure that it was satisfactory. What a satisfactory explanation might be is suggested by Armstrong's own phrase and notion at the point where he speaks of certain direct (reflective) awarenesses as not being "linked up closely with the rest of our mental life."

Armstrong's idea here is that, because such direct (reflective) awarenesses are nonconscious, they do not play the same causal roles which they would play if they were conscious. One role these direct (reflective) awarenesses do play anyway, in Armstrong's view, is to serve as bases for mental actions that pertain to the next part of the purposive mental activity whose previous part they gave information about, which affected the respective governing intention. However, Armstrong does not explain *how a direct (reflective) awareness can serve as basis for a mental action in the absence of tertiary consciousness.*

Let me mention two ways in which James (1890/1950) would treat of instances of purposive mental activity that, it might be thought, were occurring nonconsciously. First, James would insist in any case: *that such instances are no less conscious than purposive mental activities that are uncontroversially*

considered conscious. In the instances of purportedly nonconscious purposive mental activity, missing or altered would be something else, something other than the consciousness that is normally involved. However, as a part of this difference, which I must specify, the particular purposive mental activity at issue would, as Armstrong stated, not link up closely with the rest of one's mental life.

1. *Rapid forgetting.* One Jamesian interpretation of purposive mental activities that are apparently proceeding nonconsciously would explain this seeming fact in terms of rapid forgetting. Not all instances of purposive mental activity lay down adequate memory traces in the brain regarding their own occurrence. When an instance of purposive mental activity does lay down an adequate memory trace, this trace can affect the total brain process — which, James held, creates the stream of thought, pulse of mentality by pulse of mentality — in such a way that the instance of purposive mental activity can be remembered.

From James's perspective, nonconscious purposive mental activity is not what needs to be explained but, rather, *why some instances of conscious purposive mental activity are so soon forgotten.* One kind of case that Armstrong mentioned is purposive mental activity which takes place while one is sleeping. Finding oneself, upon awakening, in possession of the solution to a problem and of nothing else concerning how one has achieved this solution does not call for positing the occurrence during the night of nonconscious purposive mental activity — any more than positing dreaming that is nonconscious is needed to explain (a) being unable to remember anything at all about a dream except for how one felt while having it, even in the case, sometimes, of a dream that one had immediately before awakening, or (b) being unable to remember having just been dreaming, although one is directly (reflectively) aware of how one now feels, which is, in fact, partially a consequence of the dream one just had.

2. *A secondary stream of consciousness.* Armstrong also mentioned, as possibly involving "subliminal introspection," purposive mental activity which goes on while one has one's mind on other things. In such a case, the Jamesian alternative interpretation would likely introduce a secondary stream of consciousness that proceeds in parallel to the primary stream, which is treating of "other things." It is as parts of the secondary stream that the mental-occurrence instances would occur constituting the purportedly nonconscious purposive mental activity.

According to the Jamesian interpretation, neither stream would be capable of "direct sight" of any component of the other stream. The only direct (reflective) awareness that exists is internal to any stream of consciousness; direct (reflective) awareness is a relation between components of a single stream according to James.

The question therefore arises: *how one stream can be cognizant of a problem's solution that is achieved by the other stream.* Having had one's mind on other things, how does one realize that, meanwhile, a certain problem has been "nonconsciously" solved? One possible means of information transfer between streams is by means of behavior, overt and covert. The secondary stream may be capable of producing speech, nonverbal behavior, or even a physical posture that succeeds in conveying to the primary stream the solution that has been achieved. That is, the primary stream would thereby come to include mental-occurrence instances that possess the solution as part of their content.

There may also be more direct, neurophysiological links between the two streams, links by which a mental-occurrence instance belonging to the secondary stream and having the solution as content can get duplicated in the primary stream (cf. Berlucchi, 1983). Such a duplication would not constitute a direct (reflective) awareness between streams since it is the duplicate mental-occurrence instance, not the duplicated mental occurrence-instance, that would be the object of direct (reflective) awareness in its own stream. The same would be true of the duplicated mental-occurrence instance. In no direct way could either stream acquire knowledge of the duplication which has taken place across streams.

A Concluding Comment

Perhaps a case can be made for the automatic influence of direct (reflective) awareness on the course of certain instances of purposive mental activity. In such cases, however, we would not be choosing what next to do mentally for the continuation of that purposive mental activity. Rather, the mental activity would be purposive simply because it was initiated and sustained by an intention.

To distinguish purposive activity from simulations of it, Armstrong (1968) insisted that the feedback affecting the intention must take the "form of awareness." He stated, "Unless genuine *information* is involved, of the sort that is given in perception, for instance, we do not have genuine purposive activity" (p. 141). What if (a) the feedback information did take the form of direct (reflective) awareness and (b) this information affected relevantly the mental cause of the mental activity? Would this be a case of genuine purposive activity in the absence of choice regarding what to do next mentally?

Armstrong (1968) described as "suitable" the modification of the intention produced as a result of the feedback or, if the modification is unsuitable, it is "believed by the agent to be suitable" for the achievement of the goal of the intention. And Armstrong (1984) wrote, "On the way to the achievement of the purpose, perception of the developing situation, together with beliefs,

about, e.g., the relation of means to ends, clearly play an essential role" (pp. 153–154). In the course of purposive activity, whether mental or behavioral, which actions are taken will depend on what one believes will serve the respective purpose under the circumstances, mental or environmental, as one is aware of these.

This implies that the effect of the feedback information (which must be in the form of awareness) depends on also being aware of receiving the particular information. That is, the causal role of perceptual feedback in determining the course of purposive behavioral activity requires secondary consciousness as well; and the causal role of mental feedback in determining the course of purposive mental activity requires tertiary consciousness as well.

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