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Conscious Experience

FRED DRETSKE

There is a difference between hearing Clyde play the piano and seeing him play the piano. The difference consists in a difference in the-kind of experience caused by Clyde's piano playing. Clyde's performance can also cause a belief—the belief that he is playing the piano. A perceptual belief that he is playing the piano must be distinguished from a perceptual experience of this same event. A person (or an animal, for that matter) can hear or see a piano being played without knowing, believing, or judging that a piano is being played. Conversely, a person (I do not know about animals) can come to believe that Clyde is playing the piano without seeing or hearing him do it—without experiencing the performance for themselves.

This distinction between a perceptual experience of *x* and a perceptual belief about *x* is, I hope, obvious enough. I will spend some time enlarging upon it, but only for the sake of sorting out relevant interconnections (or lack thereof). My primary interest is not in this distinction, but, rather, in what it reveals about the nature of conscious experience and, thus, consciousness itself. For unless one understands the difference between a consciousness of things (Clyde playing the piano) and a consciousness of facts (that he is playing the piano), and the way this difference depends, in turn, on a difference between a concept-free mental state (e.g., an experience) and a concept-charged mental state (e.g., a belief), one will fail to understand how one can have conscious experiences without being aware that one is having them. One will fail to understand, therefore, how an experience can be conscious without anyone—including the person having it—being conscious of having it. Failure to understand how this is possible constitutes a failure to understand what makes something conscious and, hence, what consciousness is.

The possibility of a person's having a conscious experience she is not conscious of having will certainly sound odd, perhaps even contradictory, to those philosophers who (consciously or not) embrace an inner spotlight view of consciousness according to which a mental state is conscious in so far as the light of consciousness shines on it—thus making one conscious of it.² It will also sound confused to those like Dennett (1991) who, though rejecting theatre metaphors

¹ I am grateful to Berent Enc, Giiven Guzeldere, Lydia Sanchez, Ken Norman, David Robb and Bill Lycan for critical feedback. I would also like to thank the Editor and anonymous referees of *Mind* for a number of very helpful suggestions.

² I am thinking here of those who subscribe to what are called higher order thought (HOT) theories of consciousness, theories that hold that what makes an experience conscious is its being an object of some higher-order thought or experience. See Rosenthal (1986, 1990, 1991), Armstrong (1968, 1980, especially Ch. 4, "What is Consciousness?") and Lycan (1987, 1992). I return to these theories in §4.

(and the spotlight images they encourage), espouse a kind of first person operationalism about mental phenomena that links conscious mental states to those that can be reported and of which, therefore, the reporter is necessarily aware of having.

There is, however, nothing confused or contradictory about the idea of a conscious experience that one is not conscious of having. The first step in understanding the nature of conscious experience is understanding why this is so.

1. Awareness of facts and awareness of things.³

For purposes of this discussion I regard "conscious" and "aware" as synonyms. Being conscious of a thing (or fact) is being aware of it. Accordingly, "conscious awareness" and "consciously aware" are redundancies.

A. White (1964) describes interesting differences between the ordinary use of "aware" and "conscious". He also describes the different liaisons they have to noticing, attending, and realizing. Though my treatment of these expressions (for the purposes of this inquiry) as synonymous blurs some of these ordinary distinctions, even (occasionally) violating some of the strictures White records, nothing essential to my project is lost by ignoring the niceties. No useful theory of consciousness can hope (nor, I think, should it even aspire) to capture all the subtle nuances of ordinary usage.

By contrasting our awareness of things (x) with our awareness of facts (that P) I mean to be distinguishing particular (spatial) objects and (temporal) events⁴ on the one hand from facts involving these things on the other. Clyde (a physical object), his piano (another object), and Clyde's playing his piano (an event) are all things as I am using the word "thing"; that he is playing his piano is a fact. Things are neither true nor false though, in the case of events, states of affairs, and conditions, we sometimes speak of them as what makes a statement true. Facts are what we express in making true statements about things. We describe our awareness of facts by using a factive complement, a that-clause, after the verb; we describe our awareness of things by using a (concrete) noun or noun phrase as direct object of the verb. We are aware of Clyde, his piano, and of Clyde's playing his piano (things); we are also aware that he is playing the piano (a fact).

³ This section is a summary and minor extension of points I have made elsewhere; see especially Dretske 1969, 1978, 1979.

⁴ When I speak of events I should be understood to be including any of a large assortment of entities that occupy temporal positions (or duration): happenings, occurrences, states, states-of-affairs, processes, conditions, situations, and so on. In speaking of these as temporal entities, I do not mean to deny that they have spatial attributes —nly that they do so in a way that is derived from the objects to which they happen. Games occur in stadiums because that is where the players are when they play the game. Movements (of a passenger, say) occur in a vehicle because that is where the person is when she moves.

Seeing, hearing, and smelling x are ways of being conscious of x .⁵ Seeing a tree, smelling a rose, and feeling a wrinkle is to be (perceptually) aware (conscious) of the tree, the rose, and the wrinkle. There may be other ways of being conscious of objects and events. It may be that thinking or dreaming about Clyde is a way of being aware of Clyde without perceiving him.⁶ I do not deny it (though I think it stretches usage). I affirm, only, the converse: that to see and feel a thing is to be (perceptually) conscious of it. And the same is true of facts: to see, smell, or feel that P is to be (or become) aware that P . Hence,

(1) S sees (hears, etc.) x (or that P) \Rightarrow S is conscious of x (that P)⁷

In this essay I shall be mainly concerned with perceptual forms of consciousness. So when I speak of S 's being conscious (or aware) of something I will have in mind S 's seeing, hearing, smelling, or in some way sensing a thing (or fact).

Consciousness of facts implies a deployment of concepts. If S is aware that x is F , then S has the concept F and uses (applies) it in his awareness of x .⁸ If a person smells that the toast is burning, thus becoming aware that the toast is burning, this person applies the concept burning (perhaps also the concept toast) to what he smells. One cannot be conscious that the toast is burning unless one understands what toast is and what it means to burn—unless, that is, one has the concepts needed to classify objects and events in this way. I will follow the practice of supposing that our awareness of facts takes the form of a belief. Thus, to smell that the toast is burning is to be aware that the toast is burning is to believe that the toast is burning. It is conventional in epistemology to assume that when perceptual verbs take factive nominals as complements, what is being described is not just belief but knowledge. Seeing or smelling that the toast is burning is a way of coming to know (or, at least, verifying the knowledge) that the toast is burning. It will be enough for present purposes if we operate with a weaker claim: that perceptual awareness of facts is a mental state or attitude that involves the possession and use of concepts, the sort of cognitive or intellectual capacity involved in

⁵ White (1964, p. 42) calls "aware" a polymorphous concept (p. 6); it takes many forms. What it is to become or be aware of something depends on what one is aware of. To become aware of a perceptual object takes the form of seeing for hearing or smelling or tasting or feeling it.

⁶ One must distinguish Clyde from such things as Clyde's location, virtues, etc. One can be aware of Clyde's location and virtues without, at the time, perceiving them. But unlike Clyde, his virtues and location are not what I am calling things. See the discussion of abstract objects below.

⁷ I will not try to distinguish direct from indirect forms of perception (and, thus, awareness). We speak of seeing Michael Jordan on TV. If this counts as seeing Michael Jordan, then (for purposes of this essay), it also counts as being aware or conscious of Michael Jordan (on TV). Likewise, if one has philosophical scruples about saying one smells a rose or hears a bell—thinking, perhaps, that it is really only scents and sounds (not the objects that give off those scents or make those sounds) that one smells and hears—then, when I speak of being conscious of a flower (by smelling) or bell (by hearing), one can translate this as being indirectly conscious of the flower via its scent and the bell via the sound it makes.

⁸ Generally speaking, the concepts necessary for awareness of facts are those corresponding to terms occurring obliquely in the clause (the that-clause) describing the fact one is aware of.

thought and belief. I will, for convenience, take belief (that P) as the normal realization of an awareness that P .

Perceptual awareness of facts has a close tie with behaviour — with, in particular (for those who have language), an ability to *say* what one is aware of. This is not so with a consciousness of things. One can smell or see (hence, be conscious of) burning toast while having little or no understanding of what toast is or what it means to bum. "What is that strange smell?" might well be the remark of someone who smells burning toast but is ignorant of what toast is or what it means to bum something. The cat can smell, and thus be aware of, burning toast as well as the cook, but only the cook will be aware that the toast is burning (or that it is the toast that is burning).

The first time I became aware of an armadillo (I saw it on a Texas road), I did not know what it was. I did not even know what armadillos were, much less what they looked like. My ignorance did not impair my eyesight, of course. I saw the animal. I was aware of it ahead of me on the road. That is why I swerved. Ignorance of what armadillos are or how they look can prevent someone from being conscious of certain facts (that the object crossing the road is an armadillo) without impairing in the slightest one's awareness of the things — the armadillos crossing roads — that (so to speak) constitute these facts. This suggests the following important result. For all things (as specified above) x and properties F ,

(2) S is conscious of $x \not\Rightarrow S$ is conscious that x is F .

Though (2) strikes me as self-evident, I have discovered, over the years, that it does not strike everyone that way. The reason it does not (I have also found) is usually connected with a failure to appreciate or apply one or more of the following distinctions. The first two are, I hope, more or less obvious. I will be brief. The third will take a little longer.

(a) *Not Implying vs. Implying Not*. There is a big difference between denying that A implies B and affirming that A implies not- B . (2) does not affirm, it denies, an implication. It does not say that one can only be aware of a thing by *not* being aware of what it is.

(b) *Implication vs. Implicature*. The implication (2) denies is a logical implication, not a Gricean (1989) implicature. *Saying* you are aware of an F (i.e., a thing, x , which is F) implies (as a conversational implication) that you are aware that x is F . Anyone who said he was conscious of (e.g., saw or smelled) an armadillo would (normally) imply that he thought it was an armadillo. This is true, but irrelevant.

(c) *Concrete Objects vs. Abstract Objects*. When perceptual verbs (including the generic "aware of" and "conscious of") are followed by abstract nouns (the difference, the number, the answer, the problem, the size, the colour) and interrogative nominals (where the cat is, who he is talking to, when they left), what is being described is normally an awareness of some (unspecified) fact. The abstract noun phrase or interrogative nominal stands in for some factive clause. Thus, seeing (being conscious of) the difference between A and B is to see (be conscious) *that* they differ. If the problem is the clogged drain, then to be aware of the prob-

lem is to be aware that the drain is clogged. To be aware of the problem it isn't enough to be aware of (e.g., to see) the thing that is the problem (the clogged drain). One has to see (the fact) *that* it is clogged. Until one becomes aware of this fact, one hasn't become aware of the problem. Likewise, to see where the cat is hiding is to see that it is hiding *there*, for some value of "there".

This can get tricky, and is often the source of confusion in discussing what can be observed. This is not the place for gory details, but I must mention one instance of this problem since it will come up again when we discuss which aspects of experience are conscious when we are perceiving a complicated scene. To use a traditional philosophical example, suppose S sees a speckled hen on which there are (on the facing side) 27 speckles. Each speckle is clearly visible. Not troubling to count, S does not realize that (hence, is not aware that) there are 27 speckles. Nonetheless, we assume that S looked long enough, and carefully enough, to see each speckle. In such a case, although S is aware of all 27 speckles (things), he is not aware of the number of speckles because being aware of the number of speckles requires being aware that there is that number of speckles (a fact), and S is not aware of this fact.⁹ For epistemological purposes, abstract objects are disguised facts; you cannot be conscious of these objects without being conscious of a fact.

(2) is a thesis about concrete objects. The values of *x* are *things* as this was defined above. Abstract objects do not count as things for purposes of (2). Hence, even though one cannot see the difference between A and B without seeing that they differ, cannot be aware of the number of speckles on the hen without being aware that there are 27, and cannot be conscious of an object's irregular shape without being conscious that it has an irregular shape, this is irrelevant to the truth of (2).

As linguists (e.g., Lees, 1963, p. 14) observe, however, abstract nouns may appear in copula sentences opposite both factive (that) clauses and concrete nominal. We can say that the problem is *that his tonsils are inflamed* (a fact); but we can also say that the problem is, simply, *his (inflamed) tonsils* (a thing). This can give rise to an ambiguity when the abstract noun is the object of a perceptual verb. Though it is, I think, normal to interpret the abstract noun as referring to a fact in perceptual contexts, there exists the possibility of interpreting it as referring to a thing. Thus, suppose that Tom at time t_1 differs (perceptibly) from Tom at t_2 only in having a moustache at t_2 . S sees Tom at both times but does not notice the moustache—is not, therefore, aware that he has grown a moustache. Since, however, S spends twenty minutes talking to Tom in broad daylight, it is reasonable to say that although S did not notice the moustache, he (must) nonetheless have seen it.¹⁰ If S did see Tom's moustache without (as we say) registering it at the

⁹ I am here indebted to Perkins' (1983, pp. 295-305) insightful discussion.

¹⁰ If it helps, the reader may suppose that later, at t_3 , S remembers having seen Tom's moustache at t_2 while being completely unaware at the time (i.e., at t_2) that Tom had a moustache. Such later memories are not essential (S may see the moustache and *never* realise he saw it), but they may, at this point in the discussion, help calm verificationists' anxieties about the example.

time, can we describe S as seeing, and thus (in this sense) being aware of, a difference in Tom's appearance between t_1 and t_2 ? In the factive sense of awareness (the normal interpretation, I think), no; S was not aware that there was a difference. S was not aware at t_2 that Tom had a moustache. In the thing sense of awareness, however, the answer is: yes. S was aware of the moustache at t_2 , something he was not aware of at t_1 , and the moustache is a difference in Tom's appearance.

If, as in this example, "the difference between A and B" is taken to refer, not to the fact that A and B differ, but to a particular element or condition of A and B that constitutes their difference, then seeing the difference between A and B would be seeing this element or condition—a thing, not a fact. In this thing sense of "the difference" a person or animal who had not yet learned to discriminate (in any behaviourally relevant way) between (say) two forms might nonetheless be said to see (and in this sense be aware of) the difference between them if it saw the parts of one that distinguished it from the other. When two objects differ in this perceptible way, one can be conscious of the thing (speckle, line, star, stripe) that is the difference without being conscious of the difference (= conscious *that* they differ). In order to avoid confusion about this critical (for my purposes) point, I will, when speaking of our awareness or consciousness of something designated by an abstract noun or phrase (the colour, the size, the difference, the number, etc.), always specify whether I mean thing-awareness or fact-awareness. To be thing-aware of a difference is to be aware of the thing (some object, event, or condition, x) that makes the difference. To be fact-aware of the difference is to be aware of the fact that there is a difference (not necessarily the fact that x is the difference). In the above example, S was thing-aware, but not fact-aware, of the difference between Tom at t_1 and t_2 . He was (at t_2) aware of the thing that made the difference, but not fact-aware (at t_2 or later) of this difference.

So much by way of clarifying (2). What can be said in its support? I have already given several examples of properties or kinds, F, which are such that one can be aware of a thing which is F without being aware that it is F (an armadillo, burning toast, a moustache). But (2) says something stronger. It says that there is no property F which is such that an awareness of a thing which is F requires an awareness of the fact that it is F. It may be felt that this is much too strong. One can, to be sure, see armadillos without seeing that they are armadillos, but perhaps one must, in order to see them, see that they are (say) animals of some sort. To see x (which is an animal) is to see that it is an animal. If this sounds implausible (one can surely mistake an animal for a rock or a bush) maybe one must, in seeing an object, at least see that it is an object of some sort. To be aware of a thing is at least be aware that it is ... how shall we say it? ... a thing. *Something or other*. Whether or not this is true depends, of course, on what is involved in being aware that a thing is a thing. Since we can certainly see a physical object without being aware that it is a physical object (we can think we are hallucinating), the required concept F (required to be aware that x is F) cannot be much of a concept. It seems most implausible to suppose infants and animals (presumably, conscious of things) have concepts of this sort. If the concept one must have to be aware of

something is a concept that applies to everything one can be aware of, what is the point of insisting that one must have it to be aware?

I therefore conclude that awareness of things (x) requires no fact-awareness (that x is F , for any F) of those things.¹¹ Those who feel that this conclusion has too little support are welcome to substitute a weaker version of (2): namely, there is no reasonably specific property F which is such that awareness of a thing which is F requires fact-awareness that it is F . This will not affect my use of (2).

2. *Conscious beings and conscious states.*

Agents are said to be conscious in an intransitive sense of this word (he regained consciousness) and in a transitive sense (he was conscious of her). I will follow Rosenthal (1990) and refer to both as creature consciousness. Creature consciousness (whether transitive or intransitive) is to be contrasted with what Rosenthal calls state consciousness — the (always intransitive) sense in which certain internal states, processes, events and attitudes (typically in or of conscious beings) are said to be conscious.

For purposes of being explicit about my own (standard, I hope) way of using these words, I assume that for any x and P ,

(3) S is conscious of x or that $P \Rightarrow S$ is conscious (a conscious being).

That is, transitive (creature) consciousness implies intransitive (creature) consciousness. You cannot see or hear, taste or smell, a thing without (thereby) being conscious.¹² You cannot be aware that your cheque-book doesn't balance or conscious that you are late for an appointment (a fact) without being a conscious being.¹³

The converse of (3) is more problematic. Perhaps one can be conscious without being conscious of anything. Some philosophers think that during hallucination, for example, one might be fully conscious but (qua hallucinator) not conscious of anything. To suppose that hallucination (involving intransitive consciousness) is a consciousness of something would (or so it is feared) commit one to objectionable mental particulars — the sense data that one hallucinates. Whether or not this is so I will not try to say. I leave the issue open. (3) only

¹¹ For further arguments see Dretske (1969, Ch. 2; 1979; 1981, Ch. 6; and my reply to Heil in McLaughlin, 1991, pp. 180-185).

¹² White (1964, p. 59): "Being conscious or unconscious *of* so and so is not the same as simply being conscious or unconscious. If there is anything of which a man is conscious, it follows that he is conscious; to lose consciousness is to cease to be conscious of anything."

¹³ One might mention dreams as a possible exception to (3): one is (in a dream) aware of certain things (images?) while being asleep and, therefore, unconscious in the intransitive sense. I think this is not a genuine exception to (3), but since I do not want to get side-tracked arguing about it, I let the possibility stand as a "possible" exception. Nothing will depend on how the matter is decided.

endorses the innocent idea that beings who are conscious of something are conscious; it does not say that conscious beings must be conscious of something.

By way of interconnecting creature and state consciousness I also posit:

(4) S is conscious of x or that $P \Rightarrow S$ is in a conscious state of some sort.

Transitive creature consciousness requires state (of the creature) consciousness. S's consciousness of x or that P is a relational state of affairs; it involves both the agent, S, and the object (or fact) S is conscious of. The conscious state which (according to (4)) S must be in when he is conscious of x or that P, however, is not the sort of state the existence of which logically requires x or the condition described by P. Tokens of this state type may be caused by x or the condition described by "P" (and when they are, they may qualify as experiences of x or knowledge that P), but to qualify as a token of this type, x and the condition described by "P" are not necessary.

Thus, according to (4), when I see or hear Clyde playing the piano (or that he is playing the piano) and (thus) am conscious of him playing the piano (or that he is playing the piano), I am in a conscious state of some kind. When hallucinating (or simply when listening to a recording) I can be in the same kind of conscious state even if Clyde is not playing the piano (or I do not perceive him playing the piano). When Clyde is not playing the piano (or I am not perceiving him play the piano), we speak of the conscious state in question not as knowledge (that he is playing the piano) but as belief, not as perception (of Clyde playing the piano) but as hallucination (or perception of something *else*).¹³

I do not know how to argue for (4). I would like to say that it states the obvious and leave it at that. I know, however, that nothing is obvious in this area. Not even the obvious. (4) says that our perceptual awareness of both things (smelling the burning toast) and facts (becoming aware that it is burning) involves, in some essential way, conscious subjective (i.e., non-relational and, in this sense, internal or subjective) states of the perceiver—beliefs (in the case of awareness of facts) and experiences (in the awareness of things). Not everything that happens in or to us when we become conscious of some external object or fact is conscious, of course. Certain events, processes, and states involved in the processing of sensory information are presumably not conscious. But something, some state or other of S, either an experience or a belief, has to be conscious in order for S to be made conscious of the things and facts around him. If the state of S caused by x is not a conscious state, then the causation will not make S conscious of x. This is why one can contract poison ivy without ever becoming aware of the plant that poisons one. The plant causes one to occupy an internal state of some sort, yes, but this internal state is not a conscious state. Hence, one is not (at least not in contracting poison ivy) conscious of the plant.

¹³ For purposes of illustrating distinctions I use a simple causal theory of knowledge (to know that P is to be caused to believe that P by the fact that P) and perception (to perceive is to be caused to have an experience by x). Though sympathetic to certain versions of these theories, I wish to remain neutral here.

David Armstrong (1980, p. 59) has a favourite example that he uses to illustrate differences in consciousness. Some may think it tells against (4). I think it does not. Armstrong asks one to imagine a long-distance truck driver:

After driving for long periods of time, particularly at night, it is possible to "come to" and realize that for some time past one has been driving without being aware of what one has been doing. The coming-to is an alarming experience. It is natural to describe what went on before one came to by saying that during that time one lacked consciousness. Yet it seems clear that, in the two senses of the word that we have so far isolated, consciousness was present. There was mental activity, and as part of that mental activity, there was perception. That is to say, there was minimal consciousness and perceptual consciousness. If there is an inclination to doubt this, then consider the extraordinary sophistication of the activities successfully undertaken during the period of "unconsciousness". (p. 59)

Armstrong thinks it plausible to say that the driver is conscious (perceptually) of the road, the curves, the stop signs, etc. He *sees* the road. I agree. There is transitive creature consciousness of both things (the roads, the stop signs) and facts (that the road curves left. that the stop sign is red, etc.). How else explain the extraordinary performance?

But does the driver thereby have, in accordance with (4), conscious experiences of the road? Armstrong thinks there is a form of consciousness that the driver lacks. I agree. He thinks what the driver lacks is an introspective awareness, a perception-like awareness, of the current states and activities of his own mind. Once again, I agree. The driver is neither thing-aware nor fact-aware of his own mental states (including whatever experiences he is having of the road). I am not sure that normal people have this in normal circumstances, but I'm certainly willing to agree that the truck driver lacks it. But where does this leave us? Armstrong says (p. 61) that if one is not introspectively aware of a mental state (e.g., an experience), then it (the experience) is "in one good sense of the word" unconscious. I disagree. The only sense in which it is unconscious is that the person whose state it is is not conscious of having it. But from this it does not follow that the state itself is unconscious. Not unless one accepts a higher-order theory according to which state-consciousness is analysed in terms of creature-consciousness of the state. Such a theory may be true, but it is by no means obvious. I shall, in fact, argue that it is false. At any rate, such a theory cannot be invoked at this stage of the proceedings as an objection to (4). (4) is, as it should be, neutral about what makes the state of a person (who is transitively conscious of *x* or that *P*) a conscious state.

I therefore accept Armstrong's example, his description of what forms of consciousness the driver has, and the fact that the driver lacks an important type of higher level (introspective) consciousness of his own mental states. What we disagree about is whether any of this implies that the driver's experiences of the road (whatever it is in the driver that is required to make him conscious of the road) are themselves unconscious. We will return to that question in the final section.

Many investigators take perceptual experience and belief to be paradigmatic conscious phenomena.¹⁵ If one chooses to talk about state consciousness (in addition to creature consciousness) at all, the clearest and most compelling instance of it is in the domain of sensory experience and belief. My present visual experience of the screen in front of me and my present perceptual beliefs about what is on that screen are internal states that deserve classification as conscious if anything does. (4) merely records a decision to regard such perceptual phenomena as central (but by no means the only) instances of conscious mental states.

Such is my justification for accepting (4). I will continue to refer to the conscious states associated with our consciousness of things (hearing Clyde playing the piano) as experiences and our consciousness of facts (that he is playing the piano) as beliefs. This is, I think, fairly standard usage. I have not, of course, said what an experience or a belief is. I won't try. That is not my project. I am trying to say what makes (or doesn't make) an experience conscious, not what makes it an experience.

Consciousness of things—e.g., seeing a stoplight turn green—requires a conscious experience of that thing. Consciousness of a fact—that the stop light is turning green—requires a conscious belief that this is a fact. And we can have the first without the second—an awareness of the stoplight's turning green without an awareness that it is turning green—hence a conscious experience (of the light's turning green) without a conscious belief (that it is turning green). Likewise, we can have the second without the first—a conscious belief about the stoplight, that it is turning green, without an experience of it. Someone I trust tells me (and I believe her) that the stoplight is turning green. So much by way of summary of the relationships between the forms of consciousness codified in (1) through (4).

We are, I think, now in a position to answer some preliminary questions. First: can one have conscious experiences without being conscious that one is having them? Can there, in other words, be conscious states without the person in whom they occur being fact-aware of their occurrence? Second: can there be conscious states in a person who is not thing-aware of them? These are important preliminary questions because important theories of what makes a mental state conscious, including what passes as orthodox theory today, depend on negative answers to one (or, in some cases both) of these questions. If, as I believe, the answers to both questions are affirmative, then these theories are simply wrong.

3. Experienced differences require different experiences.

Glance at Figure 1 long enough to assure yourself that you have seen all the elements composing constellation Alpha (on the left) and constellation Beta (on the

¹⁵ E.g., Baars (1988), Velmans (1991), Humphrey (1992).

right). It may be necessary to change fixation points in order to foveate (focus on the sensitive part of the retina) all parts of Alpha and Beta. If the figure is being held at arm's length, though, this should not be necessary though it may occur anyway via the frequent involuntary saccades the eyes make. A second or two should suffice.

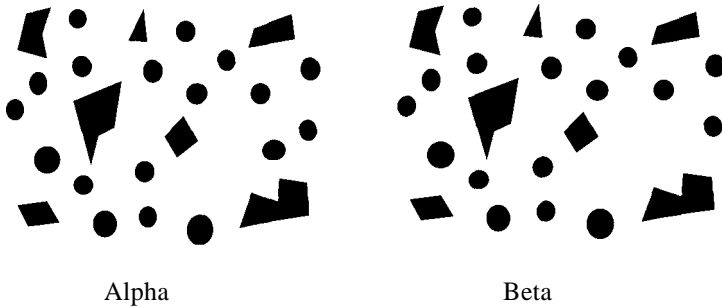


Figure 1

During this brief interval some readers may have noticed the difference between Alpha and Beta. For expository purposes, I will assume no one did. The difference is indicated in Figure 2. Call the spot, the one that occurs in Alpha but not Beta, Spot.

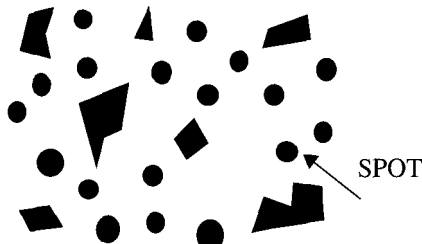


Figure 2

According to my assumptions, then, everyone (when looking at Figure 1) saw Spot. Hence, according to (1), everyone was aware of the thing that constitutes the difference between Alpha and Beta. According to (4), then, everyone consciously experienced (i.e., had a conscious experience of) the thing that distinguishes Alpha from Beta. Everyone, therefore, was thing-aware, but not fact-aware, of the difference between Alpha and Beta. Spot, if you like, is Alpha's moustache.

Let $E(\text{Alpha})$ and $E(\text{Beta})$ stand for one's experience of Alpha and one's experience of Beta respectively. Alpha and Beta differ; Alpha has Spot as a part, Beta does not. $E(\text{Alpha})$ and $E(\text{Beta})$ must also differ. $E(\text{Alpha})$ has an element corresponding to (caused by) Spot. $E(\text{Beta})$ does not. $E(\text{Alpha})$ contains or embodies, as a part, an $E(\text{Spot})$, an experience of Spot, while $E(\text{Beta})$ does not. If it did not, then one's experience of Alpha would have been the same as one's experience of

Beta and, hence, contrary to (4), one would not have seen Spot when looking at Alpha.¹⁶

One can, of course, be conscious of things that differ without one's experience of them differing in any intrinsic way. Think of seeing visually indistinguishable objects — similar-looking thumb tacks, say. One sees (experiences) numerically different things, but one's experience of them is the same. Both experiences are conscious, and they are experiences of different things, but the differences in the experiences are not conscious differences. The differences are extrinsic to the experience itself. It is like having an experience in Chicago and another one in New York. The numerically different experiences may be qualitatively identical even though they have different (relational) properties — one occurs in Chicago, the other in New York. The perception of (visually) indistinguishable thumb tacks is like that.

The experiences of Alpha and Beta, however, are not like that. They are qualitatively different. They differ in their relational properties, yes, as all numerically different objects do, but they also differ in their intrinsic properties. These two experiences are not only experiences of qualitatively different objects (Alpha and Beta), they are experiences of the qualitative differences. The respects in which Alpha and Beta differ are not only visible, they are (by hypothesis) seen. One is, after all, thing-aware of Spot, the difference between Alpha and Beta. The experiences are not distinguished in terms of their intrinsic qualities by the person who has the experiences, of course, but that is merely to say that there is, on the part of this person, no fact-awareness of any differences in his experience of Alpha and his experience of Beta. That, though, is not the issue. The question is one about differences in a person's conscious experiences, not a question about a person's awareness of differences in his experiences. It is a question about *state* consciousness, not a question about *creature* consciousness.

Once one makes the distinction between state and creature consciousness and embraces the distinction between fact- and thing-awareness, there is no reason to suppose that a person must be able to distinguish (i.e., tell the difference between) his conscious experiences. Qualitative differences in conscious experiences are *state* differences; distinguishing these differences, on the other hand, is a fact about the *creature* consciousness of the person in whom these experiences occur.

The argument assumes, of course, that if one is thing-aware of the difference between Alpha and Beta (i.e., thing-aware of Spot), then E(Alpha) and E(Beta) must differ. It assumes, that is, that *experienced* differences require different experiences. What else could experienced differences be? The difference between E(Alpha) and E(Beta), then, is being taken to be the same as the difference between seeing, in broad daylight, directly in front of your eyes, one finger raised and two fingers raised. Seeing the two fingers is not like seeing a flock of geese (from a distance) where individual geese are "fused" into a whole and not seen. In the case of

¹⁶ I do not think it necessary to speculate about how E(Spot) is realized or about its exact relation to E(Alpha). I certainly do not think E(Spot) must literally be a *spatial* part of E(Alpha) in the way Spot is a spatial part of Alpha. The argument is that there is an intrinsic *difference* between E(Alpha) and E(Beta). E(Spot) is just a convenient way of referring to this difference.

the fingers, one sees both the finger on the left and the finger on the right. Quite a different experience from seeing only the finger on the left. When the numbers get larger, as they do with Alpha and Beta, the experiences are no longer discernibly different to the person having them. Given that each spot is seen, however, the experiences are, nonetheless, different. Large numbers merely make it harder to achieve fact-awareness of the differences on the part of the person experiencing the differences. $E(\text{Spot})$ is really no different than the difference between experiencing one finger and two fingers in broad daylight. The only difference is that in the case of Alpha and Beta there is no fact-awareness of the thing that makes the difference.¹⁷

Since the point is critical to my argument, let me emphasize the last point. In speaking of conscious differences in experience it is important to remember that one need not be conscious of the difference (= conscious that such a difference exists) in order for such differences to exist. Readers who noticed a difference between Alpha and Beta were, thereby, fact-aware of the difference between Alpha and Beta. Such readers may also have become fact-aware (by inference?) of the difference between their experience of Alpha and their experience of Beta—i.e., the difference between $E(\text{Alpha})$ and $E(\text{Beta})$. But readers who were only thing-aware of the difference between Alpha and Beta were not fact-conscious of the difference between Alpha and Beta. They were not, therefore, fact-conscious of any difference between $E(\text{Alpha})$ and $E(\text{Beta})$ —their conscious experience of Alpha and Beta. These are conscious differences of which no one is conscious.

In saying that the reader was conscious of Spot—and, hence, in this sense, the difference between Alpha and Beta—without being conscious of the fact that they differed, we commit ourselves to the possibility of differences in conscious experience that are not reflected in conscious belief. Consciousness of Spot requires a conscious experience of Spot, a conscious $E(\text{Spot})$; yet, there is nothing in one's conscious beliefs—either about Spot, about the difference between Alpha and Beta, or about the difference between $E(\text{Alpha})$ and $E(\text{Beta})$ —that registers this difference. What we have in such cases is internal state consciousness with no corresponding (transitive) creature consciousness of the conscious state.¹⁸ With no creature consciousness we lack any way of discovering, even in our own case, that there exists this difference in conscious state. To regard this as

¹⁷ Speaking of large numbers, Elizabeth, a remarkable eidetiker (a person who can maintain visual images for a long time) studied by Stromeyer and Psotka (1970), was tested with computer-generated random-dot stereograms. She looked at a 10,000 dot pattern for one minute with one eye. Then she looked at another 10,000 dot pattern with the other eye. Some of the individual dots in the second pattern were systematically offset so that a figure in depth would emerge (as in using a stereoscope) if the patterns from the two eyes were fused. Elizabeth succeeded in superimposing the eidetic image that she retained from the first pattern over the second pattern. She saw the figure that normal subjects can only see by viewing the two patterns (one with each eye) simultaneously.

I note here that to fuse the two patterns the individual dots seen with one eye must somehow be paired with those retained by the brain (not the eye; this is not an after-image) from the other eye.

¹⁸ I return, in the next section, to the question of whether we might not have thing-awareness of $E(\text{Spot})$ —that is, the same kind of awareness of the difference between $E(\text{Alpha})$ and $E(\text{Beta})$ as we have of the difference between Alpha and Beta.

a contradiction is merely to confuse the way an internal state like an experience can be conscious with the way the person who is in that state can be, or fail to be, conscious of it.

It may be supposed that my conclusion rests on the special character of my example. Alpha contains a numerically distinct element, Spot, and our intuitions about what is required to see a (distinct) thing are, perhaps, shaping our intuitions about the character of the experience needed to see it. Let me, therefore, borrow an example from Irvin Rock (1983). Once again, the reader is asked to view Figure 3 (after Rock 1983, p. 54) for a second and then say which, Alpha or Beta at the bottom, is the same as the figure shown at the top.

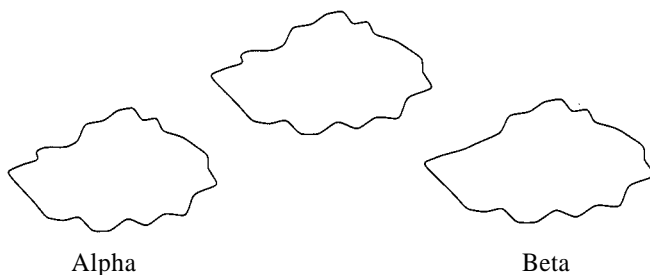


Figure 3

As closer inspection reveals, the upper left part of Alpha contains a few wiggles found in the original but not in Beta. Experimental subjects asked to identify which form it was they had seen did no better than chance. Many of them did not notice that there were wiggles on the figure they were shown. At least they could not remember having seen them. As Rock (1983, p. 55) observes:

Taken together, these results imply that when a given region of a figure is a nonconsequential part of the whole, something is lacking in the perception of it, with the result that no adequate memory of it seems to be established.

No adequate *memory* of it is established because, I submit, at the time the figure is seen there is no fact-awareness of the wiggles. You cannot remember *that* there are wiggles on the left if you were never aware that there were wiggles on the left.¹⁹ Subjects were (or may well have been) aware (thing-aware) of the wiggles (they saw them), but never became aware that they were there. The wiggles are what Spot (or Tom's moustache) is: a thing one is thing-aware of but never notices. What is lacking in the subject's perception of the figure, then, is an

¹⁹ Though there may be other ways of remembering the wiggles. To use an earlier example, one might remember seeing Tom's moustache without (at the time) noticing it (being fact-aware of it). Even if one cannot remember *that* Tom had a moustache (since one never knew this), one can, I think, remember *seeing* Tom's moustache. This is the kind of memory (episodic vs. declarative) involved in a well-known example: remembering how many windows there are in a familiar house (e.g., the house one grew up in) by imagining oneself walking through the house and counting the windows. One does not, in this case, remember that there were 23 windows although one comes to know that there were 23 windows by using one's memory.

awareness of certain facts (that there are wiggles on the upper left), not (at least not necessarily) an awareness of the things (the wiggles) on the left.

In some minds the second example may suffer from the same defects as the first: it exploits subtle (at least not easily noticeable) differences in detail of the object being perceived. The differences are out there in the objects, yes, but who can say whether these differences are registered in here, in our experience of the objects? Perhaps our conviction (or my conviction) that we do see (and, hence, consciously experience) these points of detail, *despite* not noticing them, is simply a result of the fact that we see figures (Alpha and Beta, for instance) between which there are visible differences, differences that *could* be identified (noticed) by an appropriate shift of attention. But just because the details are visible does not mean that we see them or, if we do, that there must be some intrinsic (conscious) difference in the experience of the figures that differ in these points of detail.

This is a way of saying that conscious experiences, the sort of experiences you have when looking around the room, cannot differ unless one is consciously aware that they differ. Nothing mental is to count as conscious (no state consciousness) unless one is conscious of it (without creature consciousness). This objection smacks of verificationism, but calling it names does nothing to blunt its appeal. So I offer one final example. It will, of necessity, come at the same point in a more indirect way. I turn to perceptually salient conditions, conditions it is hard to believe are not consciously experienced. In order to break the connection between experience and belief, between thing-awareness and fact-awareness, then, I turn to creatures with a diminished capacity for fact-awareness.¹⁹

Eleanor Gibson (1969, p. 284), in reporting Kluver's studies with monkeys, describes a case in which the animals are trained to the larger of two rectangles. When the rectangles are altered in size, the monkeys continue to respond to the larger of the two—whatever their absolute size happens to be. In Kluver's words, they "abstract" the LARGER THAN relation. After they succeed in abstracting this relation, and when responding appropriately to the larger (A) of two presented rectangles (A and B), we can say that they are aware of A, aware of B (thing-awareness), and aware that A is larger than B (fact awareness). Some philosophers may be a little uncomfortable about assigning beliefs to monkeys in these situations, uncomfortable about saying that the monkey is aware *that* A is larger than B, but let that pass. The monkeys at least exhibit a differential response, and that is enough. How shall we describe the monkeys' perceptual situation *before* they learned to abstract this relation? Did the rectangles *look* different to the monkeys? Was there any difference in their experience of A and B *before* they became aware that A was larger than B? We can imagine the difference in size to be as great as we please. They were not fact-aware of the difference, not aware that A is larger than B, to be sure. But that isn't the question. The question is: were they conscious of the condition of A and B that, so to speak,

¹⁹ The following is an adaptation of the discussion in Dretske (1981, p.151-2).

makes it true that A is larger than B?²¹ Does their experience of objects change when, presented with two objects the same size, one of these objects expands making it much larger than the other? If not, how could these animals ever learn to do what they are being trained to do—distinguish between A's being larger than B and A's not being larger than B?

It seems reasonable to suppose that, prior to learning, the monkeys were thing-aware of a difference which they only became fact-aware of after learning was complete. Their experience of A and B was different, consciously so, before they were capable of exhibiting this difference in behaviour. Learning of this sort is simply the development of fact-awareness from-thing-awareness.

The situation becomes even more compelling if we present the monkeys with three rectangles and try to get them to abstract the INTERMEDIATE IN SIZE relation. This more difficult problem proves capable of solution by chimpanzees, but monkeys find it extremely difficult. Suppose monkey M cannot solve it. What shall we say about M's perceptual condition when he sees three rectangles, A, B and C of descending size. If we use behavioural criteria for what kind of facts M is conscious of and assume that M has already mastered the first abstraction (the LARGER THAN relation), M is aware of the three rectangles, A, B and C. M is also aware that A is larger than B, that B is larger than C, and that A is larger than C. M is not, however, aware that B is INTERMEDIATE IN SIZE even though this is logically implied by the facts he is aware of. Clearly, although M is not (and, apparently, cannot be made) aware of the fact that B is intermediate in size, he is nonetheless aware of the differences (A's being larger than B, B's being larger than C) that logically constitute the fact that he is not aware of. B's being intermediate in size is a condition the monkey is thing-aware of but cannot be made fact-aware of. There are conscious features of the animal's experiences that are not registered in the animal's fact-awareness and, hence, not evinced in the animal's deliberate behaviour.

4. *What, then, makes experiences conscious?*

We have just concluded that there can be conscious differences in a person's experience of the world—and, in this sense, conscious features of his experience—of which that person is not conscious. If this is true, then it cannot be a person's awareness of a mental state that makes that state conscious. E(Spot) is conscious, and it constitutes a conscious difference between E(Alpha) and E(Beta) even though no one, including the person in whom it occurs, being conscious of it. It follows, therefore, that what makes a mental state conscious cannot be our con-

²¹ *Conditions*, recall, are things in my sense of this word. One can be aware of an object's condition (its movement, for instance) without being aware that it is moving. This is what happens when one sees an adjacent vehicle's movement *as* one's own movement or an object's movement as an expansion or contraction. It is also what occurs in infants and, perhaps, animals who do not have the concept of movement: they are aware of O's movement, but not aware that O is moving.

sciousness of it. If we have conscious experiences, beliefs, desires, and fears, it cannot be our introspective awareness of them that makes them conscious.

This conclusion is a bit premature. The argument mounted in §3 was primarily directed at higher-order-thought (HOT) theories that take an experience or a belief (mental states) to be conscious in virtue of their being the object of some higher-order-thought-like entity, a higher-order mental state that (like a thought) involves the deployment of concepts. My concern in §3, therefore, was to show that conscious experience required no fact-awareness—either of facts related to what one experiences (e.g., Spot) or of facts related to the experience itself (e.g., E(Spot)). One does not have to be fact-aware of E(Spot) in order for E(Spot) to be conscious.

This leaves the possibility, however, that in order for one's experience of Spot to be conscious, one must be thing-aware of it. Perhaps, that is, E(Spot) is conscious, not because there is some higher order *thought* (involving concepts) about E(Spot), but rather because there is a higher-order *experience* (a non-conceptual mental state) of E(Spot), something that makes one thing-aware of E(Spot) in the same way one is thing-aware (perceptually) of Spot. This is a form of the HOT theory that Lycan (1992, p. 216) describes as Locke's "inner sense" account of state-consciousness. What makes an experience conscious is not one's (fact) awareness that one is having it, but one's (thing) awareness of it.

To my mind, Rosenthal (1990, pp. 34ff.) makes a convincing case against this "inner sense" version of state consciousness. He points out, for example, that one of the respects in which experiences are unlike thoughts is in having a sensory quality to them. E(Alpha), for instance, has visual, not auditory or tactile qualities. If what made E(Alpha) into a conscious experience was some higher order experience of E(Alpha), one would expect some distinctive qualia of this higher-order experience to intrude. But all one finds are the qualia associated with E(Alpha), the lower-order experience. For this reason (among others) Rosenthal himself prefers a version of the inner spotlight theory of consciousness in which the spotlight is something in the nature of a fact-awareness, not thing-awareness, of the lower order mental state or activity.

Aside, though, from the merits of such specific objections, I think the "inner sense" approach loses all its attraction once the distinction between thing-awareness and fact-awareness is firmly in place. Notice, first, that if it is thing-awareness of a mental state that is supposed to make that mental state conscious, then the "inner sense" theory has no grounds for saying that E(Spot) is not conscious. For a person might well be thing-aware of E(Spot)—thus making E(Spot) conscious—just as he is thing-aware of Spot, without ever being fact-aware of it. So on this version of the spotlight theory, a failure to realize, a total unawareness of the fact *that* there is a difference between E(Alpha) and E(Beta), is irrelevant to whether there is a conscious difference between these two experiences. This being so, the "inner sense" theory of what makes a mental state conscious does nothing to *improve* one's epistemic access to one's own conscious states. *As far as one can tell*, E(Spot) (just like Spot) may as well not exist. What good is an inner spotlight, an introspective awareness of mental events, if it doesn't give one

epistemic access to the events on which it shines? The "inner sense" theory does nothing to solve the problem of what makes E(Spot) conscious. On the contrary, it multiplies the problems by multiplying the facts of which we are not aware. We started with E(Spot) and gave arguments in support of the view that E(Spot) was conscious even though the person in whom it occurred was not fact-aware of it. We are now being asked to explain this fact by another fact of which we are not fact-aware: namely, the fact that we are thing-aware of E(Spot). Neither E(Spot) nor the thing-awareness of E(Spot) makes any *discernible* difference to the person in whom they occur. This, surely, is a job for Occam's Razor.

If we do not have to be conscious of a mental-state (like an experience) for the mental state to be conscious, then, it seems, consciousness of something cannot be what it is that makes a thing conscious. Creature consciousness (of either the factive or thing form) is not necessary for state consciousness.²² What, then, makes a mental state conscious? When S smells, and thereby becomes aware of, the burning toast, what makes his experience of the burning toast a conscious experience? When S becomes aware that the light has turned green, what makes his belief that the light has turned green a conscious belief?

This is the big question, of course, and I am not confronting it in this paper. I am concerned only with a preliminary issue—a question about the relationship (or lack thereof) between creature consciousness and state consciousness. For it is the absence of this relation (in the right form) that undermines the orthodox view that what makes certain mental states conscious is one's awareness of them. Nonetheless, though I lack the space (and, at this stage, the theory) to answer the big question, I would like to indicate, if only briefly, the direction in which these considerations lead.

What makes an internal state or process conscious is the role it plays in making one (intransitively) conscious — normally, the role it plays in making one (transitively) conscious of some thing or fact. An experience of *x* is conscious, not because one is aware of the experience, or aware that one is having it, but because, being a certain sort of representation, it makes one aware of the properties (of *x*) and objects (*x* itself) of which it is a (sensory) representation. My visual experience of a barn is conscious, not because I am introspectively aware of it (or introspectively aware that I am having it), but because it (when brought about in the right way) makes me aware of the barn. It enables me to perceive the barn. For the same reason, a certain belief is conscious, not because the believer is conscious of *it* (or conscious of having it²³), but because it is a representation that makes one conscious of the fact (that *P*) that it is a belief about. Experiences and

²² Neither is it sufficient. We are conscious of a great many internal states and activities that are not themselves conscious (heart beats, a loose tooth, hiccoughs of a fetus, a cinder in the eye).

²³ If fact-awareness was what made a belief conscious, it would be very hard for young children (those under the age of 3 or 4 years, say) to have conscious beliefs. They don't yet have a firm grasp of the concept of a belief and are, therefore, unaware of the fact that they have beliefs. See Flavell (1988), Wellman (1990).

beliefs are conscious, not because you are conscious of them, but because, so to speak, you are conscious *with* them.

This is not to deny that one may, in fact, be conscious of one's own experiences in the way one is, in ordinary perception, conscious of barns and other people. Perhaps we are equipped with an introspective faculty, some special internal scanner, that takes as its objects (the xs it is an awareness of), one's experiences of barns and people. Perhaps this is so. Perhaps introspection is a form of meta-spectation—a sensing of one's own sensing of the world. I doubt this. I think introspection is best understood, not as thing-awareness, but as fact-awareness—an awareness that one has certain beliefs, thoughts, desires and experiences *without* a corresponding awareness of the things (the beliefs, thoughts, experiences and desires) themselves. Introspection is more like coming to know (be aware) that one has a virus than it is like coming to see, hear, or feel (i.e., be aware of) the virus (the thing) itself.

Whether these speculations on the nature of introspection are true or not, however, is, independent of the present thesis about consciousness. The claim is not that we are unaware of our own conscious beliefs and experiences (or unaware that we have them). It is, instead, that our being aware of them, or that we have them, is not what makes them conscious. What makes them conscious is the way they make us conscious of something else—the world we live in and (in proprioception) the condition of our own bodies.

Saying just what the special status is that makes certain internal representations conscious while other internal states (lacking this status) remain unconscious is, of course, the job for a fully developed theory of consciousness. I haven't supplied that. All I have tried to do is to indicate where not to look for it.

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