

## State Consciousness and Transitive Consciousness<sup>1</sup>

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1. When we speak of consciousness, both in ordinary and in scientific contexts, there are three distinct phenomena we commonly refer to. Because these three phenomena occur together in the normal waking lives of human beings, it is tempting to overlook that they are distinct phenomena. But a little reflection on various cases is enough to show that the three do not always occur together, and clearly distinguishing among them turns out to be crucial for theoretical purposes.

The most general phenomenon we call consciousness is a property of creatures. Being conscious in this sense is, roughly, the opposite of being asleep or knocked out; we describe a person or other animal as being conscious if it is awake and if at least some of its sensory systems are receptive in the way normal for a waking state. Otherwise we say it is unconscious. For convenience we may call this property *creature consciousness*.

There is a second phenomenon we refer to under the heading of consciousness, which we describe in terms that are ostensibly relational. When a creature senses something or thinks about some object, we say that the creature is conscious *of* that thing. A full description of a creature's being conscious of something always involves mentioning the thing the creature is conscious *of*. So it is natural to call this property *transitive consciousness*.

The third property we call consciousness is unlike the first in that it is not a property of creatures, and unlike the second in that we do not describe it in terms of some distinct object or property of which we are conscious. It is common to distinguish between mental states that are conscious and those which are not. In everyday contexts, most of the mental states we talk about are conscious mental states. But it is commonly recognized that we all are also in mental states that are not conscious states. And the property of being conscious that some mental states have and others lack is a distinct property from both creature consciousness and transitive consciousness. Even those who, following Descartes,<sup>2</sup> deny that there could be mental states that are not conscious need this distinct use of the term 'conscious' simply to insist that mental states are all conscious. Because this third property is a property only of mental states, it is useful to call it *state consciousness*.

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<sup>1</sup> This paper summarizes the argument set forth in my "Consciousness: Three Explanatory Models," forthcoming.

<sup>2</sup> E.g., "no thought can exist in us of which we are not conscious at the very moment it exists in us" [(1964–1975). In C. Adam and P. Tannery (Eds.), *Fourth replies, Oeuvres de Descartes*, VII, p. 246. Paris: J. Vrin.] and "the word 'thought' applies to all that exists in us in such a way that we are immediately conscious of it" (*Oeuvres* VII, p. 160; my translations).

State consciousness, at least in human beings, occurs in two distinct forms. When a mental state is conscious, one is to some degree and in some way conscious of that state. But normally one is not conscious of it in any attentive, focused way. Occasionally, however, we do focus deliberately on one or another of our conscious states. When a mental state is conscious and the way we are conscious of it is attentive and deliberate, we can describe that state as being *introspectively conscious*. When a state is conscious but not introspectively so, that is, when we are conscious of it in the casual, unattended way characteristic of ordinary conscious states, we can say the state is nonintrospectively conscious.

2. The familiar Cartesian thesis that mind and consciousness coincide fares quite differently depending on what sense of 'consciousness' is under consideration. The thesis is by far most plausible when transitive consciousness is in question. Being transitively conscious of something means that one is in a mental state that represents that thing. Moreover, something close to the converse holds as well. It is obvious that when we have thoughts about things, we are transitively conscious of those things.<sup>3</sup> And sensory states, such as pains and perceptual sensations, also typically represent qualities and properties of one's physical environment or one's own body. All mental states, moreover, are either intentional or sensory. So being in a mental state is very often sufficient for one to be transitively conscious of something.

Things are different, however, with the other two phenomena we call consciousness. Mind plainly does not coincide with creature consciousness. A creature's being conscious is sufficient for its being in mental states, since creature consciousness implies that a creature's sensory systems are receptive. But creatures often function mentally even when they are not conscious, as dreams make clear.

Similarly, state consciousness is again sufficient for mental functioning, but not necessary. It is widely recognized that intentional states can occur without being conscious. Many clinical and experimental results provide good reason to hold that beliefs and desires exist that are not conscious. And virtually all theorizing in cognitive science posits a wide range of intentional states that fail to be conscious.<sup>4</sup> Indeed, there are many contexts in everyday life that make it reasonable

<sup>3</sup> This may not hold, however, for intentional states of all types, that is, for intentional states that involve mental attitudes different from that of thinking that something is so. If, e.g., one wonders whether a chair is over there, or doubts or disbelieves that it is, perhaps being in these intentional states is not sufficient for one to be in any way conscious of a chair.

<sup>4</sup> John R. Searle has argued that "[w]e have no notion of the unconscious except as that which is potentially conscious" [(1992). *The Rediscovery of the mind*, p. 152. Cambridge, MA: MIT Press.] So according to Searle, when we describe something as an intentional state that is not conscious, e.g., we mean only to describe something bodily that has the causal capacity to produce a conscious intentional state (p. 160). I have argued against this latter claim elsewhere [(December 1990). On being accessible to consciousness. *The Behavioral and Brain Sciences* XIII(4), 621–622]. Here I can only note that there is a more modest reading of the claim that nonconscious mentality is potentially conscious, which maintains simply that every nonconscious mental state is an instance of a type of mental state that could have conscious instances. It is very likely this reading, moreover, which gives Searle's claim about potential consciousness whatever intuitive plausibility it has. See also Searle's (1990) "Consciousness, Explanatory Inversion, and Cognitive Science." *The Behavioral and Brain Sciences* 13(4), 585–696 and (1990) "Who is Computing with the Brain?" *The Behavioral and Brain Sciences* 13(4), 632–642.

pretheoretically to assume that people are in intentional states that they would sincerely deny being in and which therefore are not conscious.

Theorists are more divided about whether sensory states can occur without being conscious than they are about intentional states. Nonetheless, there is very good reason to hold also that sensory states need not be conscious. In subliminal perception and peripheral vision, and in some dissociative phenomena such as that which occurs in blindsight,<sup>5</sup> subjects engage in very specific patterns of behavior and report very specific mental occurrences. These behaviors and mental occurrences are very close to those which would occur if the subjects had conscious sensations with certain specific qualitative properties. So, even though subjects deny having such conscious sensations, they are evidently in states that play most of the causal roles that would be played by certain conscious sensory states. It is natural to conclude, therefore, that the states these subjects are in are in fact sensory states that are not conscious.<sup>6</sup>

Even everyday contexts provide reason for this conclusion. Many bodily sensations occur that we are plainly not conscious of all the time. For example, some moderate pains and aches seem frequently to slip out of the stream of consciousness for significant periods of time, especially when something else distracts us. We may sometimes remain conscious of both the pain and the distraction, but sometimes we cease being conscious of the pain in any way at all.

In theory, one could simply insist that when a pain slips outside our stream of consciousness that pain no longer exists, and similarly deny that peripheral vision, subliminal perception, and blindsight involve the occurrence of any sensory states. But without some non-question-begging reason for making those claims, to do so would simply be to redescribe the data for the purpose of holding onto the thesis that mind is equivalent to consciousness. It is hard to see, moreover, what a non-question-begging reason for the claims could consist in.

It is often noted that mental states are conscious just in case there is something it is like for one to be in those states.<sup>7</sup> And it is sometimes thought that this correlation sustains the idea that sensory states cannot occur without being conscious. How, it is asked, could a state have qualitative properties at all unless there is something it is like for one to be in that state? This argument again begs the question at issue. When a sensory state is conscious, there is plainly something it is like for one to be in that state, since when a sensory state is conscious we are conscious of that state and hence conscious of some of its qualitative properties. But when a mental state is not conscious, we are not in any way conscious of being in that state. Since we are then not conscious of the state or any of its distinguishing properties, there will be nothing it is like for one to be

<sup>5</sup> See Lawrence Weiskrantz (1986) *Blindsight*, Oxford: Oxford Univ. Press and (1990) "Outlooks for Blindsight: Explicit Methodologies for Implicit Processes," The Ferrier Lecture, 1989. *Proceedings of the Royal Society B* 239, 247–278.

<sup>6</sup> For more on this, see my (1991) "The Independence of Consciousness and Sensory Quality." In E. Villanueva (Ed.), *Consciousness: Philosophical issues, 1, 1991*, pp. 15–36. Atascadero, CA: Ridgeview Publishing Co.

<sup>7</sup> See Thomas Nagel (October 1974) "What Is It Like to Be a Bat?" *The Philosophical Review* LXXXIII(4), 435–450.

in the state. State consciousness of sensory states does coincide with there being something it is like for one to be in the state, but that does not show that sensory states are always conscious states.

Nor is there reason to think that sensory states can have qualitative properties only when those states are conscious, and hence there is something it is like for one to be in them. The qualitative properties of sensory states are simply the distinguishing properties of those states: the properties in virtue of which those states resemble and differ from one another. And there is no non-question-begging reason to think that these distinguishing properties occur only when we are in some way conscious of the states that have them.

Indeed, there is good reason to think the opposite. Since conscious sensory states belong to many different kinds, their being conscious cannot determine which of those kinds they belong to. What determines the mental kind a sensory state belongs to must therefore be its qualitative properties alone, independently of state consciousness. This gives us good reason to hold that these distinguishing properties are independent of state consciousness.

Ned Block has urged, in a number of places, that there can be something it is like for one to be in certain sensory states even though we wholly lack mental access to those states. Block distinguishes two things he calls consciousness: phenomenal consciousness and access consciousness. A state is phenomenally conscious if there is something it is like for one to be in that state; it is access conscious when it is available as the subject of a verbal report, in reasoning, or in rational planning. And Block maintains that certain states, for example repressed states, may be phenomenally conscious but not access conscious.<sup>8</sup>

But it is unclear why Block thinks that there is anything it is like for one to be in a particular mental state when that state is repressed, at least if the state is repressed sufficiently thoroughly that it is not at all conscious in the access sense. If a state lacks access consciousness, we are in no way transitively conscious of that state. And how can there be anything it is like for one to be in a state that we are in no way conscious of being in? It is only access consciousness, as Block defines it, that corresponds to the notion of state consciousness explicated above.<sup>9</sup> Accordingly, we have no reason to think that sensory states cannot occur without being conscious.

### 3. Distinguishing the three phenomena we call consciousness is useful in part

<sup>8</sup> Ned Block (April 1993), review of Daniel C. Dennett, *Consciousness explained*, *The journal of philosophy* XC(4), 181–193, 184; see also (June 1992) “Begging the Question against Phenomenal Consciousness,” *The Behavioral and Brain Sciences* 15(2), 205–206; (December 1990) “Consciousness and Accessibility,” *The Behavioral and Brain Sciences* XIII(4), 596–598; and, for the most extended treatment, “On a Confusion about a Function of Consciousness,” forthcoming.

<sup>9</sup> This suggests that Block may have in mind something weaker when he speaks of what it is like for one to be in a particular state. It is crucial to Block’s examples of states that have phenomenal but lack access consciousness that no sensory state could conceivably lack phenomenal consciousness (see, e.g., review of Dennett, p. 184). So perhaps all Block means by saying that there is something it is like for one to be in a sensory state is that it has some distinguishing qualitative property. Block’s insistence on the independence of access and phenomenal consciousness would then amount just to the claim I am arguing for, namely, that sensory states can have qualitative properties without state consciousness.

because it allows us to see clearly just how mind and consciousness do and do not coincide. But it is also important when we turn to explaining consciousness. In particular, isolating state consciousness and transitive consciousness as distinct phenomena allows us to distinguish the three standard strategies that are commonly put forth for explaining state consciousness, that is, for explaining what it is for a mental state to be a conscious state.

There is an important connection, already noted in passing, between state consciousness and transitive consciousness. If one is in no way transitively conscious of being in a particular mental state, then that state lacks the property of state consciousness. State consciousness implies that one is in some way or other transitively conscious of the state.<sup>10</sup> The converse, however, does not hold; it is not the case that being transitively conscious of one's mental state suffices for that state to be a conscious state. It is only when we are transitively conscious of our mental states in some suitable way that those states are conscious states.

One constraint on the way we are transitively conscious of our conscious mental states is that our transitive consciousness of them *seems*, intuitively, to be immediate. That is, nothing seems to mediate between the mental state itself and our transitive consciousness of it. This does not mean, of course, that nothing actually does mediate between the two. Nothing seems, from a subjective point of view, to mediate between the physical objects that surround us and our visual experiences of those objects; yet we know that much mediation actually occurs. Similarly, it may well be that much mental processing mediates between our conscious mental states and our being transitively conscious of those states, despite its seeming, from a subjective point of view, that no mediation occurs. A satisfactory explanation of state consciousness must address this point. It must say whether any mediation does occur, and if so it must explain why the way we are transitively conscious of our conscious states seems immediate.

Before formulating an explanation, however, we must first ask what mechanism subserves our transitive consciousness of our conscious mental states. One possibility is that the mechanism responsible for our being transitively conscious of our conscious mental states is also operative in making us transitively conscious

<sup>10</sup> Both Searle and Fred Dretske have contested this. According to Searle, it is impossible to observe or mentally represent our conscious experiences. When we represent things mentally, he claims, the things we represent must be something ontologically objective. But according to Searle, conscious states are ontologically subjective. So we cannot mentally represent them (*Rediscovery*, p. 99; cf. pp. 87–100, 137f., and 144f.) and, hence, cannot be transitively conscious of them. Because Searle's distinction between the ontologically subjective and objective is difficult to make clear sense of, however, it is unclear just what ontological subjectivity amounts to [see, e.g., Nagel (March 4, 1993), "The Mind Wins!"; review of John Searle, *The rediscovery of the mind*, *The New York review of books* XL(5), 37–41, 39–40]. So it is also unclear whether this argument is sound, and even what exactly the conclusion amounts to.

Fred Dretske argues that ordinarily we are not transitively conscious of our conscious states [(April 1993). Conscious experience. *Mind* 102(406), 263–283, esp. 272–275]. I cannot here do justice to Dretske's argument. But it is worth noting his suggestion that a state's being conscious is simply a matter of its being a case of transitive consciousness (280–281). It is likely, therefore, that what Dretske means by a mental state's being conscious is significantly weaker than the notion of state consciousness being discussed here.

of other things. There are two ways this might be the case since, as noted above, there are two ways we are transitively conscious of things other than mental states. Having a thought about something suffices for one to be transitively conscious of that thing, and having a sensation of something also makes us conscious of that object or quality. If either of these mechanisms were operative in our being transitively conscious of our conscious mental states, then our transitive consciousness of those states would be due to something external to the states themselves. Mental states would never, by themselves, be conscious; they would come to be conscious only when we are transitively conscious of them by way of one or the other of these external mechanisms.

If, on the other hand, neither of those mechanisms were responsible for our being transitively conscious of our conscious states, that transitive consciousness would be unique to that case. There would have to be a way of being transitively conscious that occurs only when we are transitively conscious of our conscious states. Moreover, any mechanism external to our conscious states that makes us transitively conscious of those states would presumably be a special case of our having thoughts about those states or sensations of them. It is hard to imagine what any other external mechanism could amount to. So if, instead, we are transitively conscious of our conscious states in a way that is unique to that case, this special type of transitive consciousness will be intrinsic to the mental states of which we are conscious.<sup>11</sup> It would then be part of what it is to be that very state that being in the state is sufficient for being in some way conscious of it.

There are, accordingly, three mechanisms that might be responsible for our being transitively conscious of a conscious mental state. We might have a sensation of the state, we might have a thought about it, or the transitive consciousness might be internal to the state itself.<sup>12</sup> Which of these three hypotheses provides the best explanation of the way we are transitively conscious of our conscious states?

Many theorists would opt either for a sensory mechanism<sup>13</sup> or for the hypothesis that the relevant transitive consciousness is intrinsic to our conscious states.<sup>14</sup> The hypothesis that it is intrinsic to those states may seem especially inviting. After all, we are not aware of anything extrinsic to these states in virtue of which we might be transitively conscious of them. But this temptation is misleading; our being unaware of a mechanism gives us no good reason to conclude that no mechanism exists. We are unaware, from a subjective point of view, of the mechanisms that subserve ordinary vision or the experience of pain, yet we know such mechanisms exist.

<sup>11</sup> By 'intrinsic property' I mean a property that the state has on its own, and not in virtue of standing in some relation to something else.

<sup>12</sup> For more on this distinction among three ways of explaining state consciousness, see my (1993) "Higher-Order Thoughts and the Appendage Theory of Consciousness." *Philosophical Psychology*, VI(2), 155–167, and "Explaining Consciousness," forthcoming.

<sup>13</sup> E.g., D. M. Armstrong (1968). *A materialist theory of the mind*, pp. 92–125, 323–338. New York: Humanities Press.

<sup>14</sup> E.g., Nagel (1991). "What Is It Like to Be a Bat?"; also Colin McGinn (1991). *The problem of consciousness*. Chaps. 1–4. Oxford: Basil Blackwell Ltd.

It is unclear what experimental or theoretical results could possibly support the hypothesis that our being transitively conscious of our conscious states is intrinsic to those states. Any relevant discovery would be compatible both with the hypothesis that our transitive consciousness is intrinsic to our conscious states and the hypothesis that it is extrinsic to them. Moreover, there are theoretical advantages to construing this transitive consciousness as extrinsic. For example, some mental states occur sometimes consciously and sometimes not. This happens with both sensory states such as headaches and intentional states such as desires. It is hard to see how we could explain this if our being transitively conscious of our conscious states were an intrinsic property of those states.

If the intrinsicist model will not work, how about the sensory model? One reason this hypothesis is inviting is that it holds out promise for explaining the conscious qualitative properties our conscious sensory states exhibit. Perhaps our conscious sensory states inherit these qualitative properties from the higher-order sensory process by means of which we are transitively conscious of our conscious sensory states. But this explanation will not work; it merely postpones the problem about conscious sensory qualities, since we would then still need to explain the qualitative properties exhibited by those higher-order sensory processes.

Theorists have also found the sensory model inviting because it is thought that the model might enable us to explain why our being transitively conscious of our conscious states seems unmediated. Our perceptions of the things around us normally seem unmediated. So if some sensory process is responsible for our being transitively conscious of our conscious sensory states, the immediacy in how we are conscious of those states would just be a special case of the immediacy of perceiving. But again the advantage is illusory. For one thing, as already noted, perceiving is not actually immediate, but only seems that way from a subjective point of view. And in any case, we need not appeal to the apparent immediacy of ordinary perceiving to explain why our transitive consciousness of our conscious states seems to be unmediated. It seems to us to be unmediated simply because we are not conscious of the mediating mechanism. Whatever mental processes may actually mediate between our conscious states and our being transitively conscious of them, we are not conscious of them.

4. Only one explanatory model remains: the higher-order-thought (HOT) hypothesis. We are conscious of our conscious mental states by virtue of having accompanying thoughts about those states. When a mental state is conscious, we are transitively conscious that we are in that state. So the HOT that accompanies it will be a thought to the effect that one is in the target mental state. Because these thoughts are about other mental states, it will be convenient to call them higher-order thoughts (HOTs).

In normal waking life we are of course not conscious of having any such HOTs. But as already noted, we are in many intentional states of which we are in no way conscious. Moreover, the HOT hypothesis predicts that we would not usually be aware of our HOTs; only if we had third-order thoughts about our HOTs would those HOTs themselves be conscious thoughts, and it is reasonable to suppose that such third-order thoughts are relatively rare.

That these HOTs are usually not conscious thoughts fits well with the distinc-

tion noted earlier between ordinary, nonintrospective state consciousness and the more unusual case in which our mental states are introspectively conscious. When our mental states are conscious but not introspectively so, we are not aware of any accompanying HOTs. But sometimes we consciously direct our thoughts to one or another of our conscious states. In these cases, the HOTs we have about the states we are scrutinizing become conscious thoughts, and the states under scrutiny are then introspectively conscious states. Introspective consciousness is the special case of state consciousness in which our HOTs are themselves conscious states.

What about there being something it is like for us to be in our conscious sensory states? Can the HOT hypothesis explain the qualitative properties our conscious sensory states have? As already noted, the qualitative properties that belong to our bodily and perceptual sensations are the distinguishing properties of those sensations. They are not only the properties by means of which we distinguish introspectively among sensations of various types, but also the properties in virtue of which the sensations actually differ from one another. Sensations do not change type when they become or cease to be conscious. So they have the same distinguishing properties whether or not they are conscious. Despite all this, when we are conscious of being in those states, those qualities seem somehow to “light up.” Could that “lighting up” be due to our simply having thoughts about those states? The problem is that it does not seem obvious, intuitively, why having a thought that one is in some sensory state should result in that state’s having the conscious qualitative experience characteristic of conscious sensory states. If having such thoughts cannot have that result, the HOT hypothesis must fail.

I have argued elsewhere that we have good reason to think that having thoughts about our sensory states is in fact what is responsible for there being something it is like for one to be in those sensory states. In summary, the introspective discriminations we make among our sensory states are more fine-grained when we are armed with more fine-grained concepts. So what concepts we have makes a difference to what it is like for us to be in various sensory states. We can best explain why concepts make a difference to what it is like for us to be in sensory states by reference to the HOTs these concepts figure in. HOTs presumably result in its being like something for one to be in various sensory states.<sup>15</sup>

This argument aside, however, it is for present purposes enough to note that the alternative explanations available to us are even less able to help with this problem. The sensory model is circular; we can explain the characteristic way conscious sensory states “light up” by appeal to the qualitative properties involved in the higher-order sensing of those states only if we can already explain what it is for those higher-order qualities to be “lighted up.” And it is even less helpful to hold that our transitive consciousness of our conscious states is an intrinsic property of those states. To maintain that hypothesis is simply to assert that it is intrinsic to conscious states that they are conscious. The intrinsicist

<sup>15</sup> I spell this out in detail in “Explaining Consciousness” and “Consciousness: Three Explanatory Models;” see also “The Independence of Consciousness and Sensory Quality.”



hypothesis in effect closes off any informative explanation of what state consciousness consists in.

As argued earlier, the other two hypotheses also face other difficulties, which the HOT hypothesis avoids. We may therefore conclude that at present the HOT hypothesis holds the most promise for explaining the nature of state consciousness.

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