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# Conscious Intentions

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## Abstract

It has recently been widely argued that all consciousness is perceptual, including the conscious experience of action. This paper argues that there can be a conscious component of the experience of action that is not perceptual. The argument is based on Searle's concept of "direction of fit" and the conditions of satisfaction of an intention. The conditions of satisfaction of an intention differ from those of a perception. If the intention involved in action is conscious, that conscious mental state cannot be exclusively perceptual. Hence not all consciousness is perceptual.

**Keywords:** consciousness; agency; action; experience; intentionality

## "Folk" psychology and scientific psychology

The concepts of belief, desire, intention, meaning and consciousness are ubiquitous in "ordinary" (that is, non-scientific) explanations of human behavior. The following all come from the NY Times: "just 43 percent of Americans believe that Mr. Trump was definitely born in the United States" (April 26, 2011); doctors "want a life" (April 2); "Justice John Paul Stevens had announced his intention to retire from the Supreme Court" (April 20); "Or they could black out—a condition in which they're conscious but not storing memories" (April 24); "Some activists are calling the planned demonstrations 'Azadi Friday'—Azadi meaning freedom in Kurdish" (April 28).

According to one philosophical account (Davidson, 1980a), ordinary or folk psychology puts these concepts together in the following ways to explain actions. People want various things, and they have beliefs about how to get them. When they act on a desire, they form an intention to do something that they think will get them what they want. A bodily movement counts as doing that thing provided it is caused by that intention. While one's intentions and beliefs and desires are sometimes conscious as one acts, or as one deliberates about acting, often they are not. One's reasons tend more to be conscious the more difficult the decision is, for instance in terms of thinking through what and how to act, or in terms of the costs and benefits of acting.

Challenges to "folk psychology" come from a variety of directions. Eliminativists (Churchland, 1981) argue that these "folk psychological" concepts are so flawed that they have no explanatory use. Noncausalists (Wittgenstein, 1958; Wilson, 1989) argue that the explanation of action isn't causal explanation; some alternative conceptions are that it is teleological explanation or that it is a kind of explanation that fits an action into a pattern. Libet (2004) and Wegner (2002) provide em-

pirical reason to think that the consciousness of action plays no causal role in the production of action.

In Dardis (2008) I argue for an account of causation, laws and properties that permits mental causation. If my argument succeeds, then relatively *a priori* challenges to the causal efficacy of the mental (Kim, 2005) do not work. My book offers arguments for the Davidson-style causal account of action sketched above; I will assume that account of action here. I will also assume without argument that the folk psychological concepts are not hopelessly flawed.

I take the Wegner/Libet arguments very seriously. My arguments show that mental causation is metaphysically or conceptually possible. But they certainly do not show that it is actual. The arguments that it is not actual are many and varied and I cannot do them any kind of justice here. I do, however, think that they do not succeed; see for instance Bogen (2004) and Hardcastle (2004).

This paper responds to a contemporary, empirically informed, philosophical account of consciousness (Prinz, 2007). According to Prinz, all consciousness is perceptual, including all consciousness involved in action. If this is right, or so I argue below, then one claim that the folk psychological theory of action makes turns out to be false, namely, the claim that one's intentions as one acts can be conscious. In turn, if one's intentions as one acts are never conscious, then one's consciousness isn't causally involved in one's actions in the way that folk psychology takes it to be. When we act—or so folk psychology suggests—at least sometimes we consciously decide and intend to act, and it is those conscious decisions and intentions that make the action happen. If Prinz's theory is right, this turns out to be incorrect. In what follows, I argue, on conceptual grounds, that Prinz's theory cannot be right. At the end I discuss the philosophical and empirical implications of my argument.

## Prinz: all consciousness is perceptual

Prinz (2007) argues that all consciousness is perceptual. A perceptually conscious mental state, according to Prinz, is one that is "couched in a perceptual format" (336), a format proprietary to one of the senses. Sensory systems are understood as input systems (338). Mental states that are "couched in a perceptual format" will thus have the character of states arising in the sensory systems. Prinz does not assume that perceptually conscious mental states have to come from the senses; indeed, his account of the consciousness of action has it that *those* perceptually conscious mental states originate in the motor control systems.

Since action and perception appear to be diametrically opposite aspects of the mind, consciousness of action appears to be a counterexample to the thesis that all consciousness is perceptual. Prinz uses current neurobiological theories of motor control, for example, (Frith et al., 2000), to explain how consciousness of action is perceptual. (I will call these “comparator-based theories”.) Normally when we act, a goal is sent to a motor control system. The motor control system issues two kinds of representations: inverse models that specify motor commands to make the body move so as to satisfy the goal, and forward models that (*inter alia*) represent predicted sensory consequences of the movement. When a comparator signals that sensory consequences of the movement match those predicted by the forward model, the agent has the experience of agency. If the sensory experience of the match exhausts the consciousness of action, then all consciousness of action is perceptual.

I am going to argue that Prinz’ account of the consciousness of action cannot be correct. The next two sections of the paper lay out the conceptual materials required to make the argument: the descriptive/directive distinction and the idea of direction of fit, and the distinction between “intentional” and “possessive” readings of the expression “conscious of”. With these conceptual materials laid out I go on to argue that the perceptual account of consciousness has no place for a conscious intention in action: a “directive” mental state that has the “world-to-mind” direction of fit, which is itself conscious, where our consciousness of it is “possessive” rather than “intentional”.

### Direction of fit and causal self reference

Searle (1983), following Anscombe (1957), argues for a distinction between two kinds of “direction of fit” intentional states may have (see Burge (1991); Bayne (2007, 2010) for critical discussion of Searle’s view). Perceptions and beliefs have the “mind-to-world” direction of fit, since they are satisfied (i.e., true) when they agree with how the world actually is. Desires and intentions have the “world-to-mind” direction of fit, since they are satisfied when the world agrees with them. A performative utterance—for example, “I promise to do the laundry”—has both directions of fit: it both describes something I am doing, and makes it so that I have done that very thing, that is, *promised* to do the laundry. Millikan (1995) also following Anscombe (1957) uses the terms “descriptive” and “directive” for the distinction, and argues that there is a very wide class of representations—she calls them “pushmi-pullyu” representations—that are both descriptive and directive. (Bayne, 2010) uses the terms “thetic” and “telic” for the distinction.

Perceptions and intentions (unlike beliefs and desires) have causally self-referential conditions of satisfaction (CS). My visual perception of a hummingbird would be incorrect if the hummingbird did not, in fact, cause the perception. Thus the CS of this perception are that there is a hummingbird near me and that it causes this very perception. My intention to

open the door isn’t satisfied if you open the door for me or if somehow by accident I cause it to open, and so the CS for my intention are that this very intention should cause the door to open.

Searle, Davidson (1980a) and others have argued that if a bodily movement is an action, then it must be caused by an intention. Searle distinguishes between prior intentions and intentions in action. A verbal expression of the experience of the intention in action is “I am doing A” (Searle, 1983, 84). The conscious experience of action must therefore be related in some way to the intention in action that causes the action. If that intention in action is itself conscious, then the conscious experience of action involves a conscious experience of that intention.

“Deviant causal chains” show that conscious experience of agency must (somehow) include the CS of the intention in action. Davidson’s famous example (Davidson, 1980b, 79) slightly modified goes like this: a climber wishes “to rid himself of the weight and danger” of his fellow climber on a rope. This might “so unnerve him as to cause him to loosen his hold” yet he does not do so intentionally. So the agent’s intention causes what it is the intention to do, yet the agent doesn’t do it intentionally, since the causal chain is “deviant”. Now suppose that I am trying to raise my arm. Let a tricky neuroscientist detect activity in my motor control systems, and intervene, so that (a) my arm does go up, but (b) efferent signals from my motor control systems are not the cause, rather the neuroscientist’s intervention is what triggers the activity. The causation is “deviant” relative to the causally self-referential CS of the experience. Hence my experience of raising my arm is illusory: the arm’s going up isn’t my action, even though my motor control systems were involved in making it happen. (Bayne (2010) gives essentially the same argument to show that the experience of agency is non-veridical when the neuroscientist intervenes.) My experience of action can therefore be illusory, and in rather subtle ways, with respect to what the intention in action specifies. The puzzle, to be discussed below, is how to locate the causally self-referential CS of the intention in action with respect to our consciousness of action.

### “Consciousness of”

I am going to argue that the conscious experience of the intention in action is not perceptual. Before I get to the argument I want to dwell for a moment on an ambiguity in the expression “conscious of”.

Bayne (2010) distinguishes between the “intentional” and “possessive” senses of the expression “conscious of”. Suppose I am looking at an apple, that I am conscious, and that my awareness of the apple is conscious. We might say that I am *conscious of* seeing the apple. On the “intentional” sense of the expression, the seeing, and the consciousness of the seeing, are two distinct things: the latter is an intentional state that is about the former, an intentional state which is about the apple. On the “possessive” sense of the expression, if we say

that I am conscious of seeing the apple, we are saying that the intentional state which is about the apple is itself conscious (“has/possesses consciousness”). The “of” in “consciousness of” fairly strongly implies something like intentionality (reference, aboutness): when I am conscious of the apple in front of me, my consciousness is one thing and what it’s about is another. But we also use the expression “conscious of” to report a fact about the mental state itself, regardless of what it is about: “I am conscious of seeing the apple” just means that my seeing the apple is a conscious seeing.<sup>1</sup>

Given a state of affairs reported as “consciousness of M”, where ‘M’ denotes an intentional state, if the expression “consciousness of” is understood in the intentional sense, then the state of affairs involves (at least) two distinct intentional states, M, and the intentional state that is about it (the consciousness of it). If the expression is understood in the possessive sense, then the state of affairs *may* involve only a single intentional state, M, which is conscious. (Assuming that M itself has or possesses consciousness, there *can* also be another conscious mental state M’ about M: in virtue of possessing M’ the agent is conscious of M in the intentional sense. The point of the intentional/possessive distinction is that there *need not* be another mental state M’ if the agent is conscious of M.)

Suppose I raise my arm, and do so intentionally. And suppose I am conscious of raising my arm. I am, then, “conscious of intentionally doing something.” On the “intentional” understanding of this expression, this consciousness is a conscious intentional state that is directed at or about my raising my arm. This intentional state is about my doing something, and so it is about the intention in action that causes the action. Hence it is something distinct from the intention in action. On the “possessive” understanding of the expression, the part of my action that consists of my intentional states (for example: the intention in action that causes the action) is itself conscious. Again, on the intentional understanding, there are (at least) two intentional states: the intention in action, and the intentional state that is about it (and the rest of the action). On the possessive understanding, there may be one fewer: the in-

<sup>1</sup>I suspect much philosophical mischief is made by the fact that “conscious of” can be used in both ways. For example, it is part of what drives higher-order thought accounts of consciousness (Rosenthal, 2006): if my seeing the apple is conscious, then I’m conscious of my seeing the apple, and so (it is argued) it must be that the consciousness of my seeing is constituted by an intentional state directed at the seeing. In this paper I remain entirely neutral on the higher-order thought account of consciousness. The intentional/possessive distinction I am making is unrelated to the higher-order thought theory. To illustrate: suppose I am conscious of seeing the apple, and I’m using that expression in the intentional sense, so that the mental state I’m reporting is *about* the seeing. The intentional/possessive distinction isn’t itself any kind of theory of consciousness, so nothing is entailed by that distinction about what explains the consciousness of any of these mental states. It could be a higher-order thought explanation. It need not be. It could be that the consciousness of the seeing is conscious in virtue of some intrinsic feature it has. Moreover, it could also be that the seeing itself is conscious (that is, I’m “conscious of it” in the possessive sense) in virtue of some intrinsic feature *it* has (that is: *not* in virtue of the presence of the consciousness of it (in the intentional sense)).

tion in action itself is conscious.

For the discussion that follows, it is worth noting that if we treat the phrase “consciousness of action” as expressing the intentional understanding of “consciousness of,” it is very—perhaps overwhelmingly—natural to think of the consciousness involved in intentional action as having the mind-to-world or descriptive direction of fit. On this understanding the action and the intention that causes it are distinct from the *consciousness of* that action and intention, and the consciousness of (or experience of) agency is *about* them.

By contrast, if we treat the phrase “consciousness of action” as expressing the possessive understanding of “consciousness of,” then it is natural to think of the consciousness of action in terms of the intentional states involved in action—particularly the intention in action—themselves having (possessing) consciousness. Such a view leaves open the possibility that there are *in addition* various intentional mental states involved with action that are about it: that consciousness of action is both possessive and intentional. That is the view I for which I am about to argue.

### Consciousness of the intention in action

Prinz argues that all experience of action is perceptual. For Prinz, being perceptual means having a sensory format. Having a sensory format in turn means having the mind-to-world direction of fit. Now, it certainly is correct that *some* aspects of the experience of action do have the mind-to-world direction of fit. For example, typically (although not always) agents have sensory experience of what their bodies are doing as they act.

But there is more to the experience of action than sensing that something has happened. The action must be caused by an intention in action. The experience must be an experience that one has *done* something, and so must somehow be an experience of the intention in action. If the intention in action *itself* is conscious (in the possessive sense), then the conscious experience of the action cannot be exclusively perceptual. If it were, all its intentionality would have the descriptive, mind-to-world direction of fit, and there would be nothing in the experience that has the kind of CS possessed by intentions.

Thus a dilemma for the perceptual theory of consciousness: either the intention in action is itself conscious, and its consciousness cannot be exclusively perceptual, or else the intention in action is not conscious. Since I think the intention in action *can be* conscious, I conclude that the perceptual theory cannot be the whole truth.

There are various ways to think about the collection of mental states involved in the experience of action. I will lay out some of the more plausible candidates and show that they are all impaled on the horns of this dilemma.

Could the conscious mental states involved in the conscious experience of action have both kinds of direction of fit—perhaps something along the lines of Millikan’s “pushmi-pullyu” representations? Certainly; but this sugges-

tion is inconsistent with the claim that these mental states are (exclusively) perceptual. Adding directive, world-to-mind intentionality to such states would precisely make them not completely perceptual.

Prinz argues that experience of action is the experience of the comparator signal. The comparator signal, however, does not have the right CS for the intention in action. The signal records a match between a forward model and sensory input. A verbal expression of its content might be “what my body has done matches what I predicted it would do”. So it has the descriptive, mind-to-world direction of fit, and correspondingly the world-to-mind direction of causation: the match is supposed to cause the experience.

The representational components of the comparator system also lack the right sort of CS for the intention in action. The sensory input to the comparator is a perception: it represents, and is supposed to be caused by, how the body is moving. The forward model is like a prediction and hence has the descriptive, mind-to-world direction of fit: “this is how the body is going to move”. (It also functions to make various things happen (Frith et al., 2000, 1772): dampen the experience of sensory input that matches predicted input, issue simulations of predicted sensory input to coordinate fast accurate performance, and others. These contents don’t match those of the intention in action, though: the intention represents that it makes the *action* happen, not these motor control system events.)

The *inverse* model is a better candidate to ground the conscious experience of the intention in action, since it has intention-like CS: it specifies how the body is to move, and its function is to move the body in that way. But since the inverse model has the world-to-mind direction of fit, conscious experience of it (in the possessive sense) could not be purely perceptual.

So the perceptual consciousness of the action cannot itself be, or have as a part, the intention in action. What if the perceptual consciousness of action is distinct from the intention in action? Prinz’s perceptual consciousness view treats the consciousness of action as a kind of (possibly illusory) sensation of what one is doing. This is the “intentional” understanding of “consciousness of”: the conscious representation is one thing, and what it’s about is another. So when I am conscious of acting, I’m having a sensory experience, the content of which can be expressed this way: “I am doing A”. The doing, and the intention, are therefore what is represented by the experience. The experience is not the conscious intention in action itself. The conscious experience represents agency; it is not itself a conscious intention. Hence the perceptually conscious experience has the “mind-to-world” direction of fit, and the intention itself has the “world-to-mind” direction of fit.

But if the intention in action is conscious, but distinct from the conscious experience of action, then its consciousness isn’t explained by the conscious experience of the action. And, again, since it is an intention, however its consciousness

is to be explained, it can’t be a perceptual sort of consciousness.

Finally, what if the intention in action just isn’t conscious at all? The conscious experience of action then could have the following components: sensory consciousness of bodily movement; sensory consciousness of a match between bodily movement and action plans; and some kind of conscious awareness *that* the movement was intentional, that is, that among its causes is an intention in action. That is a coherent position. Its cost is the denial that our intentions are ever conscious (that we are ever conscious of them, in the “possessive” sense). This seems like a very high price to pay.

A plausible way to avoid that price is to say that the conscious experience of action can involve as a component an intention in action, which has the world-to-mind direction of fit and the mind-to-world direction of causation, and that that intention is conscious. In such a case, part of what we are reporting is the existence of this non-perceptual state, and saying that it is conscious, in the “possessive” sense. (Since the expression “conscious of” is ambiguous, saying that someone is conscious of her action does not entail that the agent has a conscious intention in action. Someone could be conscious of doing something, in the “intentional” sense of having perceptual consciousness of her action, yet still lack a conscious intention in action. Much ordinary “unreflective” action would be like this.)

## Illusions of agency

I will wrap up by redrawing the contrast between Prinz’ view and my view of consciousness of action in terms of illusions of agency (Wegner, 2004, 650-1). We are confronted with a choice between two ways to model the relation between consciousness and the intention in action.

- On Prinz’ view, sometimes when we act we have an episode of perceptual consciousness of the action. It is consciousness of (in the intentional sense) the action having occurred, including consciousness that it was an action. The intention in action, which has directive, world-to-mind CS, is not conscious; rather, it is the mental state that the consciousness is about.

Now consider two types of illusions of agency:

- illusion of doing: suppose I have the experience of agency, but I am wrong—for example, I wave my arm and the automatic door opens. The causally self-referential CS of the intention in action are not satisfied: my intention did not make this happen. There are two mental states that are erroneous or illusory. The intention in action isn’t satisfied. And the experience that the door opening was something that I did is an illusion.
- illusion of not doing: suppose I experience alien hand syndrome (example: my left hand makes a move in checkers that I do not wish to make). I have the intention to move my hand, and my hand moves (caused to

do so in the right way by my intention), but my perceptual consciousness as it were reports to me that I did not do this: it incorrectly reports that there was no satisfied intention in action.

- On the view presented in this paper, sometimes when we act we have a conscious intention in action, the CS of which have the directive, world-to-mind direction of fit; its consciousness is therefore not exclusively perceptual. Again consider the two types of illusions of agency:
  - illusion of doing: my conscious intention to open the door occurs, but its CS is not satisfied. I don't realize this, so I take it that I opened the door.
  - illusion of not doing: in this case my intention in action to move the checkers piece is not conscious (otherwise I would have the experience of moving it). I do have the intention, and its CS are satisfied, but I do not have conscious access to it. Rather, my conscious experience is of my arm moving, with no accompanying experience of the intention.

### Discussion

I have argued that the perceptual consciousness account of the experience of action is impaled on a dilemma: either it must admit conscious intentions in actions, the consciousness of which is not exclusively perceptual, or else it must deny that intentions in action are ever conscious. Since that denial is implausible, I conclude that not all consciousness of action is perceptual. I want to underscore that much, indeed a very great deal, of consciousness of action is perceptual. Much of our experience of action has the mind-to-world direction of fit. But, if I am right, not all of our experience of action is like that.

The argument of this paper has both philosophical and empirical implications. Prinz's theory has the consequence that the folk psychological account of action is in a crucial respect wrong: folk psychology is wrong that intentions in action are conscious. If I'm right, at least to that extent the folk psychological account is vindicated. Prinz's theory has the empirical consequence that however consciousness is realized in the brain, it is not "hooked up" to action in the way suggested by folk psychology: all of the consciousness involved in action, according to Prinz, is "descriptive" or "thetic," and it does not cause the action. If I'm right, a full account of consciousness must reveal how intentions in action are sometimes conscious.

There is one other consequence that is both philosophically and empirically significant. While much of the consciousness involved with action is perceptual—it as it were presents to you what you are doing—the argument of the present paper is that some of the consciousness can be nonperceptual. This can seem philosophically surprising on a theory of the mind like that of the classical empiricists like Locke and Hume, where the contents of the mind are the same sort of thing as sensations. If there is, as I've argued, such a thing as nonperceptual consciousness, then there is also a constraint on

empirical theories of consciousness: they must explain how nonperceptual consciousness occurs.

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