

TIME FOR CONSCIOUSNESS: INTENTION AND INTROSPECTION

We humans often engage in conscious deliberation about what to do. There would be no point in deliberating if we did not think that we could act on the results of our deliberations. In many cases, conscious deliberation will result in a conscious intention to ϕ . We assume that this conscious intention will normally give rise to ϕ -ing – although there may be some exceptional cases where things go wrong. Theorists generally distinguish between two types of intentions: future intentions to ϕ later, and intentions-in-action to ϕ now. There are thus two ways in which a conscious intention can give rise to ϕ -ing. If it is an intention-in-action, it will immediately produce ϕ -ing. If, on the other hand, it is a future intention, then when the time comes to act, it will give rise to corresponding intentions-in-action, which in turn generate ϕ -ing. Not all of our actions are brought about by conscious intentions. But the assumption that we *can* act (in at least some cases) by consciously intending to do so seems fundamental to our view of who and what we are. Wegner (2002) rejects the assumption that our conscious intentions can give rise to action. His argument appeals to empirical research carried out by Libet et al. (1983). In this paper, I show that Wegner's argument presupposes a particular view of conscious intention. However, there is an alternative model available. This model has been developed by various writers in the phenomenological tradition, and most recently defended by Moran (2001). If we adopt this alternative account of conscious intention, Wegner's argument no

longer goes through, and we can retain the claim that our conscious intentions can give rise to action.

Wegner's argument

Wegner (2002) draws on empirical research to show that our conscious intentions cannot give rise to action. He appeals to some famous research carried out by Libet and his colleagues (1983), which built on the earlier discoveries of Kornhuber and Deeke (1965), and Deeke et al. (1969). By recording electrical activity in the brain, and detecting the movement of finger muscles, Kornhuber and Deeke (1965) found that brain activity increases around 0.8 seconds before the performance of a voluntary finger movement. They called this the 'readiness potential' (RP). The electrical activity is initially spread across different areas of the brain, before being confined to the area of the motor cortex responsible for controlling the movement the agent is about to perform (Deeke et al. 1969). The RP can plausibly be interpreted as cerebral preparation for voluntary movement. Libet and his colleagues used similar methods to discover when an agent becomes conscious of what they describe variously as an intention/want/urge to act (Libet et al. 1983: 627). Each subject was asked to voluntarily and spontaneously move her finger, and then register when she became aware of an intention (or want or urge) to move it. Libet and his colleagues found that the agent becomes conscious of an intention to move a significant interval *after* the brain

has begun to initiate the movement (as registered by the RP). Libet and his colleagues (1983) take their findings to show that 'the brain evidently "decides" to initiate, or at the least, prepare to initiate the act at a time before there is any reportable subjective awareness that such a decision has taken place... These considerations would appear to introduce certain constraints on the individual for exerting conscious initiation and control over his voluntary acts' (1983: 640—1). In other words, the agent's conscious intention to start acting now seems to play no role in bringing about action in the sort of cases Libet and his colleagues studied. However, they allow that the agent may consciously veto an action that has already started. They write, 'there could be a conscious "veto" that aborts the performance [of the action]' (1983: 641). Wegner, however, takes these findings to be evidence in favour of the stronger claim that conscious intention can never play a role in bringing about action because they show that 'conscious [intention]¹ arises from processes that are psychologically and anatomically distinct from the processes whereby the mind creates action' (2002: 29). But how exactly do Libet et al.'s findings

¹ Wegner speaks here of conscious *will*, but it is clear from his earlier discussion that he equates conscious will with conscious intention. He claims, for example, 'the conscious intention is... the mind's "call" for the action it will do, and so the intention seems to be the [mental state] most immediately involved in the causation of the action' (Wegner 2002: 20).

threaten the claim that our conscious intentions can bring about action?

Neither Libet and his colleagues nor Wegner make this entirely explicit, but it seems they have something like the following in mind. They presuppose the widely accepted claim that actions are essentially brought about by intentions that represent their performance. The implausibility of ontological dualism means that it is reasonable to assume that intentions are realised in the brain. Since it is plausible to interpret the RP as the cerebral preparation for action, it follows that we can identify the RP with the intention that brings about the finger movement. The reported awareness of an intention/want/urge to move is thus consciousness of the RP. The RP – i.e., the intention that produces the finger movement – begins before the subject becomes aware of it. It thus seems that the intention would have occurred whether or not the subject became aware of it, which implies that her awareness plays no role in its formation. Since the intention initiates action, it follows that the subject's consciousness of the intention plays no role in bringing about her action. Conscious awareness of intention is therefore epiphenomenal to the process of intending and acting. Wegner makes this claim explicitly when he endorses the possibility that, 'conscious will [i.e., conscious intention]... might just be a loose end – one of those things, like the action, that is caused by prior brain and mental events' (2002: 55). It is also implied by Libet's remark that 'the initiation of the voluntary act appears to be

an unconscious cerebral process... free will of whether *to act now* could not be the initiating agent [despite] each individual's own introspective feeling that he/she consciously initiates such voluntary acts' (Libet 1992: 269).

Notice that if this is correct, then Libet's concession that it may be possible to consciously veto an action that has already started cannot be defended. To veto an action is itself an action – it is something the agent does. On the assumption that actions are essentially brought about by intentions that represent their performance (this view is presupposed by both Libet's and Wegner's arguments) vetoing an action must be brought about by an intention with the content, 'I intend to veto φ -ing'. This is the case, whether we think of the veto as itself a single action, or as *part* of an action, which consists of the veto together with the preparation to φ . If the veto on its own is an action, then it will be brought about by an intention to veto φ -ing. If the veto is part of an action that also includes the preparation to φ , it is implausible to think that this action is brought about by a single intention with the content, 'I intend to φ , and then veto φ -ing'. For one thing, it's unclear why an agent would intend to perform such a pointless action. Moreover, this proposal also fails to capture Libet's intended notion of a veto, which he describes as 'a *control* function, different from simply becoming aware of the wish to act' (2003: 10). It follows that vetoing an action must be brought about by a separate

intention to veto, i.e., an intention with the content, 'I intend to veto φ -ing', which is distinct from the initial intention to φ .

Theorists of all stripes agree that ontological dualism is an untenable position. It follows that an intention to veto φ -ing must be realised in a state of the brain, just like an intention to φ .² Libet's research seemingly shows that intentions are formed prior to, and independently from, any awareness the subject has of them. It's not clear why an intention to veto should be any different. Libet (1996) does suggest that consciously vetoing an action differs from consciousness of an intention to act in that the former operates on an intention of which the agent is already conscious. For this reason, the veto may not require any preconscious cerebral preparation. He writes, 'conscious control is not a new awareness; it serves to impose a change on the volitional process and it may not be subject to the requirement of a preceding unconscious cerebral process found for awareness' (1996: 113). But it is difficult to see how this could be the case. The conscious veto must involve an intention to veto, i.e., an intention to not φ – or to prevent φ -ing – and this intention must be realised in a state of the brain, as I argue above. Given this, it is then very strange, as Velmans (2002) remarks, 'that a wish to do something has preconscious antecedents while a wish not to do something does not' (10). Perhaps more importantly, the suggestion that the conscious

² This point has also been made by other theorists, e.g., MacKay (1985) and Dennett and Kinsbourne (1992).

veto may not have any preconscious cerebral antecedents is inconsistent with a conclusion drawn by Libet (1999). He suggests that his research 'raised the possibility that all conscious mental functions are *initiated unconsciously* and become conscious only if neuronal activities persist for a sufficiently long time' (Libet 1999: 339, his italics). Since the proposed conscious veto is a conscious mental function, it too must be initiated unconsciously, only becoming conscious after a sufficient interval. It follows that if we accept Libet's and Wegner's arguments for the claim that consciousness of an intention to φ plays no role in bringing about action, then by the same lights, awareness of an intention to veto φ -ing cannot play any role in action either. We are thus left with Wegner's stronger claim that consciousness of an intention plays *no* role in producing action.

Conscious intention

The argument sketched above hinges on the claim that the reported awareness of an intention to move is awareness of the RP/the intention that initiates the finger movement. This interpretation of the experimental data presupposes a certain model of conscious intention. It assumes that to have a conscious intention is to become aware of an intention, such that the intention is the object of an act of awareness that is directed at it. The relevant sort of awareness is, of course, introspection. Different writers construe introspection differently. For Descartes (1996), e.g., it is a sort of infallible inner vision, whilst for

Armstrong (1963) in contrast, it is the brain's means of scanning its own states, and is thus fallible and liable to malfunction. What these accounts have in common, however, is that they take the structure of conscious intention to be the same as the structure of perception, where seeing a camel, e.g., involves an act of perceptual awareness that is directed at the camel. Just as the subject looks 'outward' to find out about the things located in the world around her, she 'looks inward' to 'see' what she intends. As Moran (2001) points out, there is a significant difficulty with this notion of conscious intention. It construes the subject's intentions as independent of her awareness of them. To become conscious of an intention is to become aware of something that would have occurred whether or not one was conscious of it. But this implies that the subject's consciousness of an intention plays no role in its formation. Since the subject's intentions initiate her actions, it follows that the subject's consciousness of her intentions also plays no role in bringing about her actions. Thus conscious awareness of one's intentions is epiphenomenal to the process of intending and acting. In short, the act-object model of conscious intention faces the difficulty identified by Wegner, irrespective of Libet et al.'s findings.

The problem is generated by the claim that conscious intention has an act-object structure. Writers in the phenomenological tradition such as Sartre (1958) and Merleau-Ponty (1962) offer an alternative model that construes conscious intention 'adverbially'. Rather than

taking 'conscious' to refer to an act of awareness that is directed at a separate intention as its object, the adverbial account takes 'conscious' to describe the way in which the subject intends. It may be hard to see what is being suggested here. Part of the problem is that language forces us to talk of awareness as being of something, which tacitly assumes the act-object model. Moran (2001) suggests that the idea can be clarified with the following sort of case. I am cross with my partner for not cooking dinner, and so I prepare food angrily. It does not seem correct to claim in this case that I am in a state of anger that has the food preparation as its object. A better analysis takes 'angrily' to describe the way in which I prepare the food. It describes the kind of activity that my food preparation is: angry food preparation. Similarly, 'conscious' does not pick out a state of awareness that is directed at the intention. It describes the sort of intention it is, or the way in which the subject intends. As Moran (2001) puts it, to have a conscious intention on this picture is to consciously commit oneself to a course of action, where 'consciously' describes the way in which one commits oneself. The subject consciously entertains a possible course of action – she has it before her mind, so to speak – and she consciously commits herself to doing the thing in question. If she commits herself to acting now, the conscious intention will – providing nothing goes wrong – immediately issue in action. If she commits herself to acting later, her intention will structure any further practical reasoning in which she engages – e.g., if I consciously commit myself to

dog walking at two o' clock, I will reason that I cannot also go swimming at this time. Providing all goes as it should, the conscious intention to act later will, when the time comes, generate an intention to act *now* which then brings about the relevant action.

Notice that on this account, the subject's awareness and her intention are not distinct from one another. They are fused as the single mental state or activity of consciously intending. To have a conscious intention is thus not to become aware of a mental state that exists whether or not one is conscious of it. Since one's intentions normally result in action, and given that when one consciously intends, one's awareness is not separable from one's intention, it follows that in cases where one's intentions are conscious, one's awareness (of) them is *not* epiphenomenal to the process of intending and acting.

Some care is needed here. The claim that when the subject consciously intends, her awareness and the intention are inseparable, does not commit one to the claim that *all* intentions are conscious. It seems plausible to suppose that the subject can have unconscious intentions, which bring about action. My psychoanalyst may tell me, e.g., that the reason I always forget to take sandwiches to work is because I have a suppressed desire to eat in the canteen. In this case, my action of leaving my sandwiches at home is brought about by a suppressed intention to do so, of which I am not conscious. The existence of such unconscious intentions is not ruled out by the adverbial account. What is clear, however, is that on the adverbial

account, the difference between conscious and unconscious intentions is not that between what is seen and what is hidden. Hidden things exist all along, but are simply out of view. As we have seen, the adverbial account denies that consciousness (of) an intention consists in an act of awareness that is targeted at an independently existing intention, which would have occurred whether or not the subject was aware of it. It follows that on this model, it is incorrect to think of conscious and unconscious intentions as the same but for the fact that the subject's 'inward gaze' is directed at the former. In Moran's (2001) parlance, consciously intending is a different activity from *unconsciously* intending. The exact nature of unconscious intention need not concern us here. The salient points are simply that when the subject consciously intends, her awareness is not separable from her intention, but this does not rule out cases of *unconscious* intention.

Responding to Wegner

Suppose we accept the adverbial model of conscious intention. How does Wegner's argument fare? Wegner's argument hinges on the claim that the awareness the subject reports is awareness of the RP/intention to move her finger. Since the RP/intention begins earlier than the subject's awareness of it, it seems that it would have occurred whether or not the subject became aware of it, which implies that her consciousness of the intention plays no role in its formation. But if we accept the adverbial model, we can offer an alternative interpretation

of Libet et al.'s results. We can reject the assumption that the subject's report concerns an act of awareness that has the RP/intention as its object. Instead, we can take the subject to report a conscious intention, i.e., an act of consciously intending, to move her finger, where the awareness is not separable from the intention. The RP can still be identified with the intention to move. But rather than identifying the RP with an intention that would occur whether or not the subject was aware of it, we should think of the RP as the neural event that underlies an act of consciously intending. Since the intention is what generates the finger movement, and the subject's awareness (of) the intention is inseparable from it, we can no longer conclude that her awareness is epiphenomenal to a process of intending and acting that happens independently from it. We should instead conclude that her conscious intentions *are* efficacious, and that it is her conscious intention to move her finger that brings about the movement.

One might suppose that there is still a problem. The neural event begins prior to the conscious intention, and so one might argue that they must be ontologically distinct: the RP cannot be the neural event that underlies the act of consciously intending.³ However, this depends on how we understand the relation between the neural event and the conscious intention. One option is that they are one and the same event – i.e., they are identical. Clearly, if two items are identical, they

³ Thanks to an anonymous referee for this objection.

must persist for the same length of time. The difference in duration between the RP and the conscious intention means they cannot be identical. But there are other ways of understanding their relation. A very common conception holds that neural events are *vehicles* that carry conscious goings-on as their *content*.⁴ Contents are not identical with their vehicles; instead, they are realized in them. Whilst a vehicle must exist for a particular content to be realized in it, the reverse claim – that a vehicle *only* exists *qua* vehicle for some particular content, so long as that content is realized in it – does not follow. We can see this by reflecting on the fact that some of the items claimed to be vehicles are *processes*. Processes, by definition, do not happen instantaneously; they take time. It is plausible that in some cases, the process must progress past a certain stage for the content to be realized in it.

If Libet's (1999) conjecture that neural events must achieve 'neuronal adequacy' before becoming conscious is correct, then this is exactly the case for conscious goings-on and their neural vehicles. The neural events are processes that occur over time. It is only at a certain stage that a content – some conscious event – is realized in the process. The fact that the neural event begins before the conscious event takes place is no obstacle to claiming that the former is the vehicle that carries the latter as its content. It follows that if the RP is

⁴ This distinction was first made by Millikan (1991), and Dennett and Kinsbourne (1992).

thought of as the vehicle that carries or realizes the act of consciously intending, the fact that the RP begins prior to the conscious intention does not refute the claim that the RP is the neural event that underlies the conscious intention.

Conclusion

The view that our conscious intentions can bring about action is fundamental to our ideas about what we are. Wegner appeals to Libet et al.'s findings to show that awareness of one's intentions plays no role in the production of action. I have argued that Wegner's argument presupposes the act-object view of conscious intention, where to have a conscious intention is for that intention to be the object of an act of introspective awareness. On this model, the intention exists whether or not the subject is aware of it. As I have shown, the act-object model implies Wegner's worrisome conclusion, irrespective of Libet et al.'s findings. An alternative construes conscious intention adverbially, such that to have a conscious intention is to consciously intend. If we adopt this model of conscious intention, Wegner's argument no longer goes through.

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