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Libet's Impossible Demand

***Abstract:** Libet's famous experiments, showing that apparently we become aware of our intention to act only after we have unconsciously formed it, have widely been taken to show that there is no such thing as free will. If we are not conscious of the formation of our intentions, many people think, we do not exercise the right kind of control over them. I argue that the claim this view presupposes, that only consciously initiated actions could be free, places a condition upon freedom of action which it is in principle impossible to fulfil, for reasons that are conceptual and not merely contingent. Exercising this kind of control would require that we control our control system, which would simply cause the same problem to arise at a higher-level or initiate an infinite regress of controllings. If the unconscious initiation of actions, as well as the takings of decisions, is incompatible with control over them, then free will is impossible on conceptual grounds. Thus, Libet's experiments do not constitute a separate, empirical, challenge to our freedom.*

Many people — philosophers, neuroscientists and psychologists — believe that Benjamin Libet's experiments on the timing of actions sound the death knell for free will. Libet showed, they claim, that human beings do not initiate their actions consciously. But, they argue, if we do not initiate our actions consciously then we do not exercise free will. Some philosophers and neuroscientists have reassured us that we need not worry, because Libet in fact did not show that we do not consciously initiate our actions, or alternatively, though he did show that we do not initiate our actions consciously, we nevertheless retain some degree of conscious control over the unfolding of our actions. Hence, they say, the space for conscious control, and hence for free will, has not been closed. Both sides accept that *if* Libet has demonstrated that we do not consciously initiate or consciously control our actions, then he has shown that we do not have free will.

In this paper, I shall not take sides on the question whether Libet has demonstrated that we do not consciously initiate our actions. Instead, I shall argue that opponents and supporters of what I shall call Libet's premise — that we must be

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conscious of the initiation of our actions if they are to count as free — are confused: the ability over which they argue is simply irrelevant to the question of free will. Indeed, it could matter only if we had a power which it is conceptually impossible for us, or any other kind of agent (natural or artificial, human or divine) to exercise. We do not need experimental results to show that we do not exercise the kind of control that seems to be at issue in the debate over Libet's experiments. Instead, a little reflection on the nature of deliberation and decision-making shall suffice.

The Debate Over Libet's Experiment

In one of the most famous experiments in recent neuroscience, Libet and his colleagues (Libet *et al.*, 1983) asked subjects to flick or flex their wrist whenever they wanted to, while the experimenters recorded the 'readiness potential' (RP) in their brains, which precedes voluntary movement by up to one second or more. Subjects were also asked to watch a special clock face, around which a dot of light travelled about 25 times faster than a normal clock (with each 'second' therefore being about 40 ms). They were required to note the position of the dot on the clock face at the time at which they became aware of the wish to move. Controlling for timing errors, the experimenters found that onset of RP preceded awareness of the wish by an average 400 ms.

Libet, and many other people, take these experimental results to show that we do not have free will. Free will, they (implicitly or explicitly) argue must be, or must entail, the ability consciously to choose which action we perform and when we perform it. But Libet has shown that we do not have any such ability. Consciousness comes on the scene too late for it to play any role in initiating action. Instead, our actions must be initiated unconsciously. Therefore, proponents of this line of argument have claimed, our actions are not free. As Libet himself puts it, 'a free will process implies that one could be held consciously responsible for one's choice to act or not to act. We do not hold people responsible for actions performed unconsciously, without the possibility of conscious control' (1999, p. 52). If we do not exercise conscious control, we do not exercise free will.¹ Libet's claim has been endorsed by many philosophically minded neuroscientists, as well as by other thinkers (for example, Spence, 1996; Wegner, 2002; Pockett, 2004).

[1] That is not the end of the story, for Libet. He holds that though we do not consciously *initiate* our actions — and therefore do not exercise free will in initiating them — we do possess the power consciously to *veto* actions. Hence we remain responsible for our actions, inasmuch as we failed to veto them. The claim that we possess such a veto power seems incredible: if an unconscious readiness potential must precede the initiation of an action, why does it not equally need to precede the vetoing of an action (Clark, 1999)? When Libet's subjects reported that they had vetoed an action, they exhibited a distinctive readiness potential; I suggest that we identify the initiation-and-veto with this readiness potential, rather than postulate an independent and neurologically implausible veto power which does not require causal antecedents. In any case, the points I shall make, about the conceptual impossibility of the kind of initiatory power that Libet and his supporters lament us lacking, apply equally to the kind of veto power he claims we do possess.

It is important to see that Libet was not merely rehearsing the claim that determinism is incompatible with free will. For centuries, philosophers have debated whether we can be free if our actions are determined, whether, that is, free will is compatible with determinism. Compatibilism has been the dominant position among philosophers for the past half century, though libertarianism — the view that free will is incompatible with determinism, but that determinism is false with respect to human actions — has undergone something of a renaissance in recent years. Fascinating as this debate is, it is not Libet's. His challenge to free will is a challenge to compatibilists and libertarians alike. As Robert Kane, one of the leaders of the revival of libertarianism puts it, 'If conscious willing is illusory or epiphenomenalism is true, *all* accounts of free will go down, *compatibilist and incompatibilist*' (Kane, 2005). Libet is not claiming that our origination of action is determined by forces over which we exercise no control; he is claiming that, in some sense, we do not originate our actions at all, and that seems to represent a fundamental threat to *any* kind of free will.

Rescuing free will therefore seems to require that we dispute Libet's findings; this is a task which a number of thinkers have undertaken. From several different perspectives they have argued that his experimental results do not show that we never exercise conscious free will. For instance, Flanagan (1996) argues that it is consistent with Libet's results that though we consciously initiate important or 'big picture' decisions, we leave the details of the implementation of these decisions to subpersonal processes. Thus, having consciously decided to comply with Libet's instructions to flick their wrist when they felt like it, his subjects might have delegated the details to the unconscious mechanisms upon which Libet fixes. Mele (2005) shows that it is reasonable to doubt whether Libet is right in identifying the unconscious events he tracks with the intention or the decision to flick, rather than with an urge or a desire to flick. Finally, Haggard has recently argued that though we do not consciously initiate actions, our conscious intention may coincide with the *specification* of action. We may not — freely — choose whether to act, and we may not even choose whether to allow an action to go to completion, but we do — freely — choose how *precisely* to act; whether, for instance, to use our left hand or our right (Haggard & Eimer, 1999; Haggard & Libet, 2001).

All these responses share one feature: though they do not all specifically endorse Libet's premise — that *if* we are not conscious of at least some of our decisions to initiate an action at the very moment of initiating it, we do not exercise free will in initiating it — none of them contest it either. Flanagan, for instance, argues that though the actions of Libet's subjects were not consciously initiated, responsibility for these actions tracks back to an earlier decision, to set oneself to respond as Libet asked, which may (for all we know) have been consciously made. Mele disputes that the readiness potential can be identified with a decision at all, and therefore holds that Libet has not shown that our decisions are not consciously made. Finally, Haggard claims that there is a role for consciousness in the unfolding of our action, and to that extent there remains a role for free will.

More interesting and more promising are those responses to Libet which deny his premise. Anthony Freeman (1999), David Rosenthal (2002) and Daniel Dennett (2003) all deny that our volitions must be consciously caused in order for them to count as free. Rosenthal, for instance, argues that whether our actions are free does not depend on whether we cause them consciously, but on whether our volitions fit ‘comfortably within a conscious picture we have of ourselves and of the kinds of things we characteristically want and do’ (2002, p. 219). However, these responses have had little effect upon the debate. Why have they seemed unsatisfactory to many people?

Perhaps the reason is this: many events occur in the brains of people with which they do not wish to be, and apparently ought not to be, identified. Passing thoughts and sudden urges which we find unworthy and which we quickly fight down are perfectly normal occurrences. A number of pathological syndromes give us a clue as to the kinds of monsters which may dwell within you and me. Consider, first, automatism. Agents who act in the state of automatism have been known to engage in actions which are entirely out of character, even going so far as to wound and kill (Levy & Bayne, 2004). Perhaps if we were unable to exercise conscious restraint, we would all be prone to such potentially murderous actions. Perhaps whenever we were irritated or angered by someone — when our neighbours play their music too loud, or another driver cuts us off at the lights — we would be prone to take sudden and decisive action.

Perhaps agents who could neither consciously initiate, nor veto, nor even specify the details of, actions would closely resemble those people who have lost the ability to inhibit their urges. Perhaps such agents would resemble sufferers from utilization behaviour, who respond automatically to the affordances of objects in their immediate vicinity (Lhermitte *et al.*, 1986). Or perhaps their behaviour would be more like that of sufferers from Tourette’s syndrome, who can inhibit their urges for a time, but must eventually yield to them. Libet himself suggests the comparison between unconsciously initiated actions and the behaviour of sufferers from Tourette’s syndrome:

We do not hold people responsible for actions performed unconsciously, without the possibility of conscious control. For example, actions by a person during a psychomotor epileptic seizure, or by one with Tourette’s syndrome, etc., are not regarded as actions of free will. Why then should an act unconsciously developed by a normal individual, a process over which he also has no conscious control, be regarded as an act of free will? (Libet 1999, pp. 52–3).

Dennett’s response to Libet is to argue that the self should not be identified with this or that part of the brain — with consciousness, or with the faculty of practical reasoning (if there is any such thing) — but with the entire set of cognitive processes, personal and subpersonal. ‘You are not out of the loop; you *are* the loop’ (2003, p. 242). But as the cases just cited seem to suggest, initiation or control of actions by the wrong parts of the loop cannot easily be identified with the self. Given that we all are prone to momentary impulses, that we all might do things we would later regret if we could not inhibit our urges, we cannot rest content with the suggestion that whatever we do, it will be our brain that did it.

Similar remarks apply to Freeman's (1999) contention that we ought to be held responsible for all our actions, however they are initiated. Though it may, as he claims, be valuable for us to hold *ourselves* responsible for what we do, however our actions were caused, it seems unjust for others to hold us responsible for actions over which we failed to have any control.

Rosenthal's suggestion is more interesting, insofar as it seems to offer us a means of distinguishing between actions caused by automatism and utilization behaviour, on the one hand, and merely unconsciously initiated action, on the other. He suggests that we should identify free actions with those that fit 'comfortably within a conscious picture we have of ourselves'. Given that most of us do not picture ourselves as murderers, or as people who engage in the absurd actions of sufferers from utilization behaviour, his test gives us the right answer in these cases: these actions are not free. However, his view seems vulnerable to two devastating objections. First, intuitively it seems no excuse that a particular action of mine did not fit with my view of myself. Suppose I were to steal from a poor and defenceless old lady. If my action was deliberately performed, in full knowledge of the kind of action it was, and in the absence of coercion, compulsion or mental disease, it seems that I am responsible for it, and my protests that I don't see myself as the kind of person who would do such a thing would — rightly — fall on deaf ears. Second, the test seems to miss the most important dividing line between free and unfree actions. Suppose the sufferer from utilization behaviour gradually adjusts her picture of herself to bring it into line with her frequent strange actions. Now, by Rosenthal's test, she behaves freely. But given that she is unable to inhibit her automatic responses to the affordances of objects, she fails to control her behaviour, and for this reason it is unfree. The root of the worry that Libet's experiments raise, therefore, might be this: they suggest that since we do not consciously initiate our actions, we do not control them.

The Impossible Demand

I should not like my criticisms of Rosenthal's and Dennett's views to imply that I endorse Libet's premise, that actions that are not consciously initiated are not free. In fact, Libet's premise is incoherent: the demand that actions be consciously initiated is impossible to fulfill, and this for conceptual reasons, not for reasons to do with the structure of the human brain. Moreover, there is something profoundly right about the point that Rosenthal and Dennett were each striving to make. It doesn't matter, from the point of view of free will, whether we initiate our actions consciously or unconsciously. As I have suggested, what matters is control, and control need not be conscious.

Why is Libet's demand impossible to fulfill? Consider what it would be like to fulfill it. For the sake of concreteness, imagine you are faced with some momentous choice. Suppose, for example, you have been offered a job in another city. There are many reasons in favour of your accepting the job (new and exciting challenges; better pay; more recognition, and so on) and many reasons against (your friends and family would be far away; the work raises moral qualms in

you; you worry that you may have too little autonomy, and so on). Given the importance of the choice, you decide to deliberate carefully before you make up your mind. This deliberation is, of course, carried out consciously. This seems like a paradigm of the kind of action that Libet would regard as free, since the decision is taken consciously.

But look closer; what role does consciousness actually play? What is really happening, when you consciously weigh reasons? Each reason, in favour of or against a course of action, has a weight independent of your deliberation (I claim; I shall shortly defend this claim). Where does this weight come from? It seems that it is assigned unconsciously, or at least independently of consciousness. The fact that you will miss your family and friends matters more than the fact that the job will offer you exciting challenges (say). You do not *decide* that the first matters to you more than the second; the weight of our reasons is simply assigned to them, by subpersonal mechanisms, by culture, by our system of values. Consciousness cannot assign the weights; it receives the news from elsewhere.

Matters quickly get worse, from the point of view of Libet's premise. Not only is the assignment of weight to our reasons accomplished by unconscious or nonconscious processes, but our ultimate decision itself is carried out by such processes, and then reported to consciousness. It simply seems to us that the first set of reasons, those in favour of taking the job, outweighs, or is outweighed by, the second. No more than consciousness can assign weights to each reason can it assign weights to the whole set of reasons. Instead, the output – the conclusion that the first or the second set of reasons is weightier – is simply reported to consciousness.

Of course, people sometimes act *akratically*, which is to say that they act against their own all-things-considered judgments. Defenders of Libet's premise might see the possibility of such action, against one's own assessment of one's reasons, as providing a space within which conscious will can operate. In fact, *akrasia* is of no help here whatsoever. Exactly the same problems simply crop up with regard to *akratic* actions as with regard to the assessment of reasons. Suppose I have concluded that my reasons support my accepting the job offer. Now let me consider whether or not to act as I believe I ought. How shall I make this decision? I can consciously contemplate my reasons, and the fact that they support my accepting the job, all I like. In the end, I have simply to decide to accept the offer, or not to accept it, and that is not a task that consciousness itself can accomplish. Instead, it is reported to consciousness. Just as it simply seems to me that my reasons support my accepting the job offer, in the end I will simply realize that I have decided to accept it, or to reject it (or to go on deliberating).

None of this is meant to deny that consciousness has a role to play in deliberation.² It is to deny that volitions, acts of intention-formation or decisions are themselves actions performed by consciousness. Conscious contemplation of

[2] What role might consciousness play, if it cannot initiate intentions or make decisions? I suggest that it may be an indispensable means whereby subpersonal mechanisms communicate with each other. Decisions made by conscious agents are better than those made by agents suffering from automatism

my reasons may make my decision better. I might be wrong, in my initial assessment of my reasons: I may have missed something, for instance, and continued deliberation increases the probability that it will come to my attention. But when it does come to my attention, it is, once again, subpersonal mechanisms which do the work. Suddenly I realize that I have overlooked the proximity of the town to which I am considering moving to wilderness areas of great beauty, or it strikes me that the stand-offishness I thought I detected in potential colleagues might just be shyness, or whatever. I *realize*, it *strikes* me, I *recognize*, I *comprehend*. These words, which we use to refer to our coming to understand something or to appreciate its significance, are poised between activity and passivity. Deliberation is something that I do, and that I control inasmuch as I can cease to engage in it or persist in it, but I do not and cannot *consciously* control its course or its upshot. I can neither decide what reasons there are, for me, nor can I assign weights to these reasons, nor, finally, can consciousness settle which course of action the balance of these reasons supports.

Dennett, in an earlier work which does not even mention Libet, puts his finger on the precise reason why Libet's premise is finally incoherent. Decision-making, the paradigm of activity, which Libet believes must be conscious if it is to be free, is in a strange way passive:

Are decisions voluntary? Or are they things that happen to us? From some fleeting vantage points, they seem to be the preeminently voluntary moves in our lives, the instants at which we exercise our agency to the fullest. But those same decisions can also be seen to be strangely out of our control. We have to wait to see how we are going to decide something, and when we do decide, our decision bubbles up to consciousness from we know not where. We do not witness it being *made*; we witness its *arrival* (1984, p. 78).

We cannot control our decision-making, for a simple reason. It is this: decision-making is, or is an important element of, our control system, whereby we control our activity and thereby attempt to control our surroundings. If we were able to control our control system, we should require another, higher-order, control system whereby to exert that control. And if we had such a higher-order control system, the same problems would simply arise with regard to it. The demand that we exercise conscious will seems to be the demand that we control our controlling. And that demand cannot be fulfilled.

The point I am trying to make is somewhat difficult to grasp. Perhaps it will become clearer as I try to deliver on the promise I made above, and explain why our reasons must have a weight independent of our deliberations. Suppose this were false; suppose that we could assign weights to our reasons consciously. In the light of what would we assign them? There are two possibilities, neither of which restores consciousness to the role Libet would assign it. First, we could assign weights in the light of higher-order reasons, which themselves had weight independently of our deliberation. If this were the case, however, our premise —

or other pathologies which occlude consciousness because they are better informed — informed, that is, of the agent's own values and ends. I have defended this claim elsewhere (Levy & Bayne, 2004).

that we can assign weight to our reasons which they do not possess independently — would be false. Second, we could assign weights entirely arbitrarily. For the only alternative to *recognizing* the weight that reasons have for us is arbitrariness. Either considerations have weight in the light of reasons, or they do not: either I just see, or come to grasp, that being close to my family has a certain weight for me, or I step outside the space of reasons altogether. In either case, consciousness does not play the role that Libet and his supporters believe it should. Either it recognizes reasons which exist independently of it, or it causes us to act, but not for any reasons at all. If there were conscious will, it would not be free will; it would be mere random chance. I doubt there is any such thing, and for that I'm grateful.

I shall take one more stab at getting the point across, this time by way of an example. Consider one of the paradigms of rational and free activity, intellectual discussion — say, a discussion of the role of consciousness in free will. Such a discussion takes place too fast for the participants to review what they are going to say before they say it. Instead, they rely upon (what else?) subpersonal mechanisms to take care, not only of the syntax of their sentences, but also of their sense. Good arguments might occur to them as they talk, but often *they will not be aware of the precise shape of the argument before they say it*. Arguments often seem to assemble themselves in our mouths, and come to consciousness's attention in our speech. As E.M. Forster put it, 'How can I tell what I think till I see what I say?'³ Now, it is true that sometimes we do know what we're going to say before we say it. But in that case, what we're going to say is *still* the product of subpersonal mechanisms. Consciousness may have played a role, in deliberating about we say, but that role centrally involves keeping the thought active or sending it back for further work by the subpersonal mechanisms. Just as we often do not know what we think till we see what we say, so we don't know what we think, in the privacy of our heads, until we consciously think it.

I have argued that decisions, volitions and the formations of actions must all ultimately occur unconsciously. At best, consciousness becomes aware of them as soon as they are made; it never makes them itself. Of course, Libet's topic was none of these things, but the initiation of actions. It is clear, however, that exactly the same considerations apply to the initiation of actions. Consciousness cannot itself initiate actions, any more than it can originate the intention to initiate actions. Our control system cannot itself be controlled. Consciousness can be an element of that system, even an essential element. But it cannot give the final impetus, on pain of infinite regress.

Conclusion

Libet and his supporters believe that his experimental work casts doubt on the reality of free will — necessitating either a rescue operation, or resignation to our unhappy lot. I have shown that his experimental work, no matter its soundness, no matter the strength of the many criticisms levelled at it, has no such

[3] *Aspects of the Novel* (1927) Ch. 5.

consequences. Our failure or success at being conscious of our decisions (volitions, and so on) as we make them is irrelevant to our freedom, since those decisions must be the product of unconscious mechanisms in any case. If conscious decision-making is a condition of free will, we can't have it, for reasons that have nothing to do with readiness potentials or with the structure of our brains, but because control systems cannot themselves be controlled, on pain of infinite regress. Libet's demand cannot be fulfilled, neither by us nor by angels.

Libet's premise is incoherent; if unconsciously initiated actions are incompatible with free will then we cannot have it, for reasons that are conceptual. Thus, his experiment does not constitute an empirical challenge to the reality of free will. We shall settle the question whether we can be free, not just by doing neuroscience but also by doing philosophy: by conceptual arguments designed to show what kind of control is necessary and sufficient for free will, and whether such control is compatible with unconsciously initiated action. This is not the place to begin exploring such arguments. As the inadequacies of Dennett's and Rosenthal's brief sketches shows, demonstrating that such decision-making is free is a difficult and contentious business, which would require (at minimum) another paper. Ultimately, I believe that this task can be accomplished; it can be shown that decisions formed by the *right* subpersonal mechanisms, under the right conditions, are free and morally responsible. A complete theory of free will will give consciousness an important role to play. But it will not be the role of decision-making, or forming intentions. That is a role it is not designed to play.

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