

Free Will: Convergence and Divergence of Libet and Wegner

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Abstract

In the light of the advancement in cognitive neuroscientific investigations of free will, from rCBF to EEG scan techniques and eventually fMRI scan techniques, such advanced studies on free will arguing for human determinism centre their research on the works of Libet and Wegner. The neurobiological experiment of Libet and the cognitive assessment by Wegner could be argued to eliminate the possibility of free will but Libet and Wegner's views are in tandem, non-identical and intolerant of human freedom. This article exposes the incoherency intercepting Libet and Wegner's studies and the philosophical imports that make them not coherent.

Keywords: initiation, control, readiness potential, conscious will, illusion

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Introduction

Moral responsibility has been an aftermath issue to the reality of free will (Vohs and Schooler, 2008; Mickelson, 2019) because growing evidence in scientific studies seems to substantiate the illusoriness of human free will (Searle, 2001; Wegner, 2002; Mele, 2008). Moral and scientific sceptics (Strawson, 1962; van Inwagen, 1983; Pereboom, 2001) argue that our actions happen to us rather than it being motivated and controlled by the human will. Dating back several centuries, the problem of free will has been a multi-disciplinary discourse including; philosophy, law, science, theology, anthropology, and many others. Most of the theological and philosophical debates were in vogue till the development of brain studies arrested the attention of the audience in the twentieth century. The neuroscientists had put in several attempts to unravel the intracortical brain action knowing that the brain was the centre of all bodily activities. John Eccles's claims of the will to precede all brain activities towards an action motivated Benjamin Libet's inquiry to resolve the issue of precision. Libet's investigation was intended to settle the issue of initiation and control of human action between the human will and human brain activities. The study seems to have proven the issue of precision, but the initiation and control of action is still a debate engaging further discourses. This essay presents the accounts of a cognitive neuroscientist (Libet) and a psychologist (Wegner) on the free will debate. Scholarly works of Libet and Wegner are the focus of this article. Notably, there have been very few scholars that have written on both Libet and Wegner (Dennett, 2003; Mele, 2008; Harris, 2012) despite the vast number of research on their works (Baer, Kauf & Baumeister, 2008; Sinnott-Armstrong & Nadel, 2011).

The Brain and the Will Prior to Libet's Experiment

Kornhuber and Deecke in 1956 were the first to have completed a significant time-reversed experiment on the human brain on an epistemic quest to observe the occurrence in the brain before action. A considerable period transpired after electric brain activities (*Bereitschaftspotential* BP) and before the action (Kornhuber and Deecke, 1956). This postulation indicates that BP is the electrophysiological representation of planning, preparation, and initiation of volitional acts and implies that a freely willed act has brain activities such as this electric potential occurring prior to the action. Therefore, intention or will precede electric potential. However, a test was required to justify the precision of intention to the occurrence of an electric potential. For this reason, Kornhuber and Deecke's time-reversed experiment replayed the observable process to action. This was a brain assessment and was devoid of any evidential construct of an individual's will or intention to act. In Libet's attempt to plot the occurrence of the will in conjunct with the BP (which Libet calls Readiness Potential, RP), he employs the EEG and EMG scans¹, the oscilloscope screen, and the participant's declaration. Essentially, the participant's involvement in declaring the nonfactual and unobservable intention will be key to actualising the issue of precedence between the intention and RP.

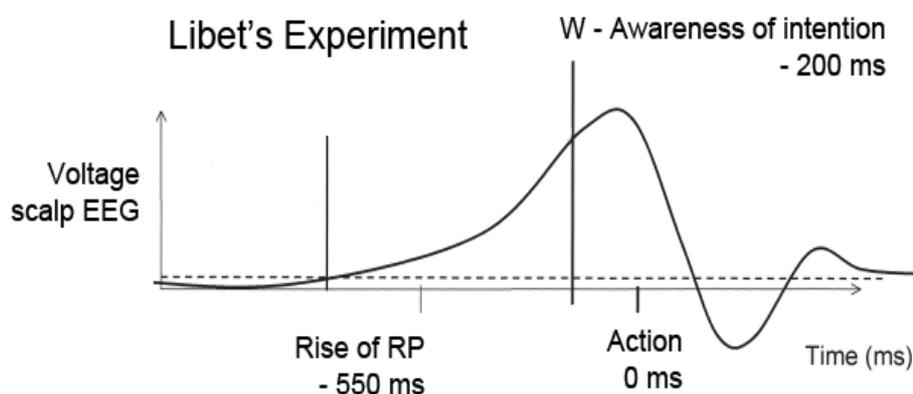
Libet's Experiment

Libet's experiment was motivated by the curiosity to test the veracity of the claim that conscious human decision-making has no initial brain activity before an agent's conscious intent to act willingly. In his experiment, Libet's (1985) participants were asked to act freely when they intend to flick their wrist (at their timing) and report the precise time with which they became conscious of their decision (to flick their wrist). The participants,

¹ EEG (Electroencephalogram) and EMG (Electromyography) scans

per subjective timing of a spot moving in a circle of an oscilloscope screen, were recorded to have articulated an average timing of intention about -200 milliseconds prior to bodily movement. Aside from the participant's timing, Libet simultaneously recorded electric events with the EEG scan in the brain, capturing the brain state prior to and during the event. The EEG scan (with an active electrode on the participant's scalp) recorded microvolts of electric potential around the Supplementary Motor Area (SMA)¹ about -550 milliseconds prior to the flicking of the wrist and -350 milliseconds prior to participant's intention timing, concurrently (Libet, 2004, pp. 125-8).

There in the brain is an exhibition of a spontaneous process of action before one's awareness. That is to say, the implication of this unaware cerebral process on free will is that on the issue of decision-making and its initiation, the conscious self is not in control of decision-making. It should be noted that Libet made several tests, about forty trials, where he required the participants to do spontaneous acts but not pre-planned acts. To have attained willing and spontaneous acts appropriate for the experiment, the experiment case presented above is what Libet deems reliable amongst the forty trials. What makes the experimental result in the above description appropriate is the type of RPs identified with two groups of acts. The first is the Type I RPs – which has recordings from participants who pre-planned to decide while looking at the oscilloscope (though they were advised not to). Moreover, the second is the Type II RPs – which has recordings of participants who spontaneously acted without pre-planning (Libet, 2004: 130). Thus, the RP results presented in the experiment described above are Type II RPs.



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Wegner's Analysis

The Wegnerian position is that our minds enchant us, and consequently, that makes us feel like we are uncaused causes of our actions (Wegner, 2008, p. 226). Broadly speaking, Wegner thinks that the problem of free will is due to a deception of our minds. This deception by the mind, the thought of having an efficacious conscious will, obstructs our understanding of the scientific, psychological, neural, and social origins of our thoughts and behaviour³. So, we are ignorantly caught up in a web of deception by our minds.

The earlier occurrence of the readiness potential to the conscious intention in a voluntary act is a supportive premise that grounds Wegner's argument in denial of free will. Wegner's⁴ neural evidence alluding to the position that we are under the illusion of the conscious will is culled from Libet's (1985) work on the timing of the readiness potential. This neural evidence stipulates that the beginning of a voluntary act seems to be an initiated unconscious cerebral process. Meanwhile, the contrary holds that many are convicted of the belief that the will causes actions to happen in our conscious states.

As conceptualised by many, the conscious will is the belief that their conscious self genuinely and freely causes their actions. This conception is flawed according to Wegner, he holds that the conscious will is nothing but a mere feeling (Wegner, 2002, p. 3). In a more radical sense, to illustrate the non-effect and illusoriness of the conscious will, it is likened that human action is a kind of magic (Wegner, 2002: 2008). The claim that human actions are like magic is to say that the actions we observe are caused, and its causal process goes beyond our observation and understanding. Thus, the process of action falls beyond our awareness. As we remain oblivious to this process, we see actions simply caused by our will.

Wegner (2002, p. 66) argues his claim to the illusion of the conscious will based on a complex causal

¹ this is a primate part of the cerebral cortex that enhances the control of movement

² Figure 2. Doyle, B. (www.informationphilosopher.com retrieved on June, 2019)

³ Ibid.

⁴ (& Wheatley, 1999, p. 481: 2002, p. 54)

process in David Hume's argument on causation's non-evidentiality. Particular to bodily actions, there are more complex micro activities that go on in the body's mechanism, which we (at the macro level) are oblivious of and may not understand. That is to say, our minds make us feel we cause things to happen when we are unaware of the elementary causal nature of the human body. "Our actions are an astonishing realm of events that bend to our desires when so much of the world does not" (Wegner, 2008, p. 226). This view suggests that our actions seem to fall in line with what we often wish for, but in an actual sense, the world does not function following what we believe and expect it to be. The actions that follow from what we intend are deceptively thought by our minds and experienced by us to have been caused by our will. This conviction is an illusion we live with, and either our mind is responsible or our excessive desire to be in control projects this illusion.

Libet and Wegner

As indicated by Libet and Wegner, the advancement in the free will debate seems to support a sceptical position of free will. Libet's discovery of an unconscious cerebral process has considerable implications on free will. Similarly, Wegner's analysis of the experience of the conscious will also have severe implications on free will. The primary issues found in Libet's and Wegner's contributions to the debate on free will are the issue of initiation and control. The issue of initiation in the free will debate is to find what or who starts the causal process of action. The solution to this issue, if appropriate or valid, might end the free will debate because the issue of initiation is one of the primary issues in discussions of free will. Unlike the issue of initiation, the issue of control is secondary. The issue of control is the contention on whether we are actually in charge of the things we believe we are doing or not.

Initiation

The debate on the initiation of human action is believed to be either by an internal causative power (the human will) or our uncaused biological makeup¹. As indicated earlier, prior to Libet's studies and findings, Kornhuber and Deecke argued that the will is the causative force that initiates actions. Later developments by Libet seem to disprove Kornhuber and Deecke's position, thereby indicating that the will is preceded by RPs and implying that the will may not be the cause of our actions since it follows a preceding event. This brings forth the contention of whether the will truly initiates one's actions, and also, whether the presence of an RP before the will denotes any causal power by the RP?

Fact from Libet's experiment indicates that the RP precedes the acclamation of the will about either -1000ms to about -550ms (Type I RPs) or -500ms to about -200ms (Type II RPs). By these results, when the agent pre-planned their decision to cull the time of their will the RP shows up about -1000ms before the action but when the decision to cull the time of the will is spontaneous, the RP is recorded by the EMG scan at about -500ms. The attempt to decipher free will in decision-making is to have a purely voluntary decision without external or internal determinants, so the cull of the will's timing needs to be spontaneous. Libet's discovery answers beyond his speculation that there could be unconscious brain activities before voluntary acts. It further proves how intentions may alter the timing of RPs. To make Libet's findings more straightforward for understanding, I present them in an argumentative structure:

1. Evidence from the EEG scan recorded on the supplementary motor area, EMG scan recordings from the wrist and participants' subjective timing have results showing the occurrence of readiness potential about -350 milliseconds to one's awareness to act.
2. Libet records that the presence of the RP shows the brain's spontaneous initiation of action process in an unconscious state (which will eventually manifest if not curtailed).
3. Since the RP presence is presupposed to precede the will even in simple actions such as flicking the wrist, then, humans are incapable of initiating positive voluntary acts.
4. Therefore, the concept of the conscious will's efficacy in decision-making is not feasible to initiate positive voluntary actions.

The argument above illustrates how Libet concludes denying humans any ability to initiate a positive voluntary action by the conscious will. The first premise points out the various methods Libet employs in his experiment. Using the EEG scan technique to read electric activities in the brain, the EMG scan technique is used to read muscle stimulation in the wrist, and simultaneously, the claim of awareness by the participants is recorded from the oscilloscope screen. The second premise states Libet's actualisation that the readiness potential automatically initiated in the brain precedes human awareness of action. Consequently, premises three and four indicate that with such simple actions as flicking of the wrist showing unconscious imitation in the brain humans are incapable of initiating positive voluntary actions.

Not to claim that the human person is incapable of voluntary action, Libet's findings make us understand first the limitations of voluntary human acts and, secondly, the antecedent brain activities preceding bodily movement. However, Libet gives an operational definition of a voluntary act in his experiment to be the function

¹ Murphy and Brown (2007)

of an individual's subjective will within specific parameters. To Libet, a voluntary act should be produced from within, the subject's initiation to act should not be externally forced or restricted (directly or indirectly). Also, the individual's subjective conviction to be acting freely is such that they can either choose to begin acting or not begin (Libet, 1993, pp. 269-70). Although our bodies sometimes perform spontaneous unconscious activities, they are different from conscious activities. Voluntary actions are conceived to be knowingly done; thus, they are surely conscious activities. On the other hand, an unconscious activity is one that the body is mechanically adjusted to due to its immediacy in our subconscious operations. An example could be the unaware act of breathing or the unintentional act of touching down our feet when waking from the bed. To some extent, as argued by Deecke¹, we are capable of unconscious acts, and we still own those acts because our unconscious state is not a different self but a constituent of one's self.

Conscious activities are activities that entail one's awareness. When a person consciously carries out an act, we mean it was an intentional activity performed by the individual. Conscious activities are not necessarily free because they could be influenced. Consider the case of a father trying to raise a ransom fund in exchange for his kidnapped daughter. Avoiding some external influences like these, a willed act is believed to be the kind of activity that is genuinely generated from one's intention, and a typical case is the act of choosing a hairstyle to trim. It is more appropriate to sample the case of willed acts to root out the initiator of decision making, considerably simple acts (Libet, 1993).

From the previous experimental trials by Kornhuber and Deecke (1965), subjects were limited about 6 seconds in choice during the self-paced acts (Libet, 2004, p. 124), so, to help attain a higher feat, Libet opens up the agents' choice to decide to be a spontaneous one. Different from Kornhuber and Deecke's experiment, Libet considers inquiring when the conscious will to act occurred concerning the brain's readiness to act represented by the RP.

The primary request that the six participants were to respond to was to make a voluntary act of flicking their wrist while reporting the time they were aware of deciding on the oscilloscope clock. The oscilloscope is just like a standard clock but has a count of 60 seconds with a black spot moving along its circumference like the second hand of a wall clock. The issue here is voluntary actions. Their experiment could have been organised with involuntary actions, and it will have corresponding results different from Libet's. However, in this case (Libet's experiment), the participants are free to decide when they want to flick their wrists. The alarming results that seem to convey that our mind has long deceived us that we consciously initiate our actions make one question some of the procedures. Such questions may be: how does Libet arrive at his results, why are the EEG and EMG scan techniques appropriate, and why does the reliance on introspective reports?

Libet claims that the EEG and EMG scan techniques are appropriate for his experiment for a reason. Libet (2004, p. 23) opines that the rCBF, PET, and fMRI scan techniques² make the scientist the location in the brain where neuronal activities may be tied to the various mental operations. Moreover, the results produced by these techniques make us oblivious of outcomes such as the local patterns of brain activities, frequencies of firing, and other neuronal activities. Insufficiently, the evidence presented does not communicate the timing in the relationship between changes in the nerve cell activities and mental function. So, there is inequality in a relational change in brain activities against the change in conscious awareness of a particular event. Libet further mentions that vital changes in nerve cell activities can occur in milliseconds. The changes in the nerve cells' metabolic energy will take these techniques seconds late to capture these changes in measurable amounts. Hence, the primary quest of Libet to settle whether intention occurs prior to cerebral initiation of a voluntary act or not cannot be settled alone by these techniques.

Introspective reports by participants actualised conscious subjective experiences. Conscious subjective experience points to that internal feel generated from a person's experiences. This experience only remains transparent to the first person even though it could be reported to another person (Libet, 1993, p. 272). A typical example is whether the pedestrian felt any pain when the car tyre rode on his shoe. Such incidents bear an introspective feel on the subject's experience such that the subject is the point of verification. Even with neurophysiological machines, readings could show an action potential pointing to a signalling receptor from the afferent nerve cells from the pedestrian's foot. Yet, the machines cannot tell us whether the pedestrian felt the pain. This implies the need for a subjective acclamation of an internal experience. It is popularly conceived that the reality of conscious experience is tied to one's neuronal makeup because consciousness subsists on the existence and function of a brain (Libet, 2004, p. 19). Libet (1993) admits that the nature of conscious subjective experience makes it inaccessible to a third party. Moreover, this implies that a test on conscious subjective experience will have the subject as the introspective reporter of inner qualitative feels. The observables during the experimental process are outer qualitative experiences, and those are verifiable.

Several researchers hold reluctance to the usage of introspective reports as scientific proofs due to the

¹ (2012, p. 410)

² rCBF (Regional Cerebral Blood Flow), PET (Position Emission Tomography) and fMRI (Functional Magnetic Resonance Imaging) scan techniques

reports being bias-prone and possibly erroneous (Libet, 1993). However, Libet proceeded by including introspective reports, based on an assumption. Libet assumes that any variance developing from an introspective report and external observer's reports could be reduced to an insignificant difference. This reduction could be achieved by opting for more fundamental kinds of experiences which do not include emotional content, so, the test results could be reliable. The covert nature of conscious subjective experience has been an issue worth investigating for the philosopher and the neuroscientist. Investigative attempts to demystify the relationship between the mind and the brain, according to Libet (2004), will not produce a reliable solution to knowing the mind-brain relationship unless scientists unravel how they can have accurate introspective reports.

On Wegner's account, the debate of the initiation of action is sourced from Libet's experiment indicating that there is an unconscious cerebral electric activity that initiates human action. The answer to what causes our actions is an unconscious cause of action, thus, the initiation of action is a deterministic course that is devoid of human willing. To Wegner, human actions are automated without any causal efficacy of the will. Wegner strongly expresses the inefficacy of the will by explicating the illusion of the experience of the will orchestrated by the mind. By this argument, Wegner expresses in his theory of apparent mental causation that the mind tricks us into feeling that we caused our actions when we actually don't.

Theory of Apparent Mental Causation

Wegner's conception of illusive experience of the will led to the formulation of the Theory of Apparent Mental Causation. The theory of apparent mental causation states that conscious will is experienced when people interpret their thoughts as the cause of their actions (Wegner and Wheatly, 1999). The notion that there is some level of uncertainty that makes our causal claims erroneous is a rationale assuring this theory's feasibility. The Humean influence on Wegner makes his (Wegner) claim a contradictory view from the conventional belief of the will. People usually believe that the will is a causal force that yields human actions.

On the other hand, Wegner, in his analysis, discusses the will, as perceived, as the "interpretation of the apparent link between conscious thoughts that appear in association with action and the nature of observed action" (Wegner, 2002, p. 65). This description suggests that when the nature of action follows precisely what is expected to be caused by the conscious thought, then it is perceived that the will is in causal action. However, to Wegner, our thoughts' causal insufficiency causing actions is due to the unobservable nature of causation. Moreover, this could mean that anything could cause anything. If so, then even our conscious thought and its associated action could be caused by a third variable that may be unknown to us.

Drawing on the assertion that we are oblivious of the causal process involved in the occurrence of our actions, the theory of apparent mental causation dwells on the claim that consciousness does not know how conscious mental processes operate (Wegner, 2002, p. 67). The unawareness of consciousness of its procedural operations is fascinating. However, Wegner explains by illustrating that when one answers a quick calculation from his mind (like 2 times 4) the answer pops up without any awareness of how it happened. Therefore, the conscious will does not remain an immediate perception of the relation between thought and its resulting act. Instead, the conscious will is a feeling based on the causal inference an individual makes about the data that beholds consciousness. This causal inference falls between a person's thought and the observed act.

Wegner (2002) hypothesises that there is an unconscious path to human action that may be devoid of our awareness. This unconscious path of causal interactions is what causes both our thoughts and action. The possibility of a third variable in the causal relation between thought and action makes the role of the unconscious path a plausible one. Furthermore, this is based on the claim that there may be or may not be an actual path from our thought to action. Since any causal path between thought and action cannot be perceived¹, it is the perception of an apparent path that generates the experience of will in us. This perception of an apparent causal path to action is a manipulation of the mind. This apparent path of mental causation makes people convinced that our will causes our actions when we experience our conscious intentions resulting in an expected voluntary act.

An individual is sufficiently convinced of the experience of the will on the availability of three conditions; priority, consistency and exclusivity (Wegner and Wheatly, 1999, p. 483). These three factors are necessary to feature with an individual's thought concerning the action for one to bear the experience of the will. In the case where the action happens when there is an intention, but no decision has been made yet, will will be absent (example: just when you are about to open a door left ajar, then it opens further, there would not be any feeling of your will causing the opening). When a conscious thought is to cause an expected act but something other than the expected moves, there will be no claims to a willful act (for example; you open your wardrobe to pick a shirt, and something falls out). Also, the absence of causal connection between thought and action, where there may be external factors instead causing the action, there will be no sense of will². Thus, the existence of the perception of apparent mental causation between thought and action needs to happen prior to the action, be

¹ (p. 67)

² (Example: trying to close a dry opened tap and suddenly, it starts flowing, one would not perceive any causal feel of the will, p. 483)

consistent with the action, and not be attached to other potential causes.

The priority, consistency and exclusivity principle are requirements for the perception of the experience of the will. The priority principle is expressed along with a certain window of opportunity (Wegner, 2002). There is the perception that the thought ought to come up within a short period before the action occurs. That is the period before the experience of the will that is believed to cause the action¹. This suggests that for the conscious thought to be perceived as the cause of the action, the event cannot start too soon or too late to the timing of the expected effect's occurrence. Thereby, the experience of the agent's perceived will to have a causal relation to the action manifests just before the action. "Thoughts that occur too far in advance of an action are not likely to be seen as the cause of it"². Having the thought of giving a colleague a gift and then, you withdraw such thought, however, you eventually find out the next day is the same colleague's birthday and you had to contribute with the group to get her a gift. Such delay in the thought will not make one feel the experience of the will as the cause of the action of gifting her.

The consistency principle has it that actions follow from thoughts, and such causal relation is meaningful for people to have the experience of the will. This principle is validated in apparent mental causation due to the association the potential causes (the thoughts) have with the actions. The relation between thought and action makes people assume consistency, which convinces people to believe their conscious will to be of a causal potency, thereby making the agents perceive the will's experience. Thought and action are perceived to be related such that it's supposed causal relation makes it semantically impossible not to hypothesise the causal power of thoughts (Wegner, 2002, p. 79). Intentions, beliefs and desires are conceived as constituting the motivations to the conscious will. Thus, as an operative principle in a self-caused act, consistency depends on cognitive process such that thoughts occurring before the act, when compared to the act, are subsequently perceived to be caused. So, when a person does what he thought he is going to do, there will be consistency between thought and action, enhancing the experience of the will³. Rather, inconsistency will occur when people think of one thing and do otherwise. This does not make their act wilful.

The exclusivity principle is to assure the agent of a self-causal influence. People sometimes tend to ignore a potential cause when other causes are available. When one's thought does not seem to appear as the exclusive cause of one's action, there is no strong feel of a conscious will. Apart from the experience of the conscious will as a potential cause, other potential causes may be our internal and external alternatives to intention (Wegner, 2002). The internal alternatives have causal tendencies laying to the side of one's conscious will, and they have their way somehow, manifesting during the state of uncertainty or spontaneously. The external alternatives to intention may include other people or external forces that impinge on us even when we think of the action in advance. These external alternatives are beyond one's control. Sometimes the external alternatives interfere in one's thoughts and expected action such that the conscious will is lessened when one becomes aware of some external force that could also be potential cause of the action.

The three principles (priority, consistency, and exclusivity) are the factors that secure an individual's experience of a conscious will – which Wegner indicates as an illusion or trick by the mind. Moreover, by this, the conscious will remain a feeling that is assumed to have a causal influence due to the experience of the will.

Control

The control of one's action is also a contentious issue in the debate on free will. However, this issue is up for discussion because of a striking difference that conflicts with the views of Libet and Wegner. While Libet's findings prove a capability of the will's causal efficacy in a window opportunity, Wegner denies any possibility of the will's causal efficacy. Thus, Libet shows a limited control of human action by the will while Wegner absolutely denies any control by the will.

Libet - Vetoing

The vetoing concept is the power of decision-making without recourse to any substance. In Libet's experiment, there is a vetoing issue on the course to complete a spontaneous voluntary act. Vetoing opportunity is that one can (with immediacy) decide not to act. This meaning of veto suggests that albeit the already unconsciously initiated spontaneous act yet to outplay, the participant can still decide not to act.

In Libet's experiment, the timing prior to -200ms is no conscious period for the participants. However, from Libet's results, participants averaged conscious awareness of about -200ms. According to Libet (2004, p. 137), about 150ms between the period of awareness (about -200ms to action) and -50ms to action is the free period opportunity for an individual to veto an act. Libet asserts that an absence of any veto decision and any plan on what to decide from the onset of Type I RPs (about -1000ms) to -50ms will eventually result in a spontaneous act initiated by the brain (p. 138). Thus, vetoing on the decision timeline remains the only window of opportunity for an individual to perform a free act.

¹ (p. 70)

² (p. 71)

³ *Ibid.*

Wegner - Automatism

In the absence of the experience of the will (which, to Wegner, is an illusory feel of the efficacy of the conscious will), an unconscious process that causes our actions remains. This idea of unconscious causation and control is described as automatism. Automatism is where a person is acting, but there is no feeling of doing (Wegner, 2002, pp. 8, 99). The fundamental understanding to describe automatism is an action devoid of conscious willing. He believes that in our conditional states of acting, certain factors possibly cloud our experience of conscious will, which results in automatism. Some of these factors could be unconscious causes, intentional causes or external causes. For instance, the individual could be acting and be oblivious of the intention of the act. There is a case where persons are unable to notice the completeness of an action. People could wrongfully assume causal inference due to immersion in thoughts unrelated to exhibiting effect. One can intentionally suppress their thoughts such that they will be blinded to the feeling of will. Additionally, the individual could fail to conceive the consistency of tying thoughts and action such that it makes their perception of the action seem unwilled. Also, people sometimes accept suggestions from people and involuntarily act on those suggestions - hypnosis (pp. 131-3). These cases suggest that the absence of the feel of will could be intentional, unconscious or external. Hence, the suggestion alludes that automatism makes it possible to execute some acts without our conscious will. Automatism's plausibility tends to support the theory of apparent mental causation in the terms that there may be an unconscious system that causes our actions and not the causal inferences we make from the perception of the will.

The entirety of Wegner's position is a strong denial of mental control like its (the conscious will) capability to cause action. Thus, the conscious will, as we infer as a causal power, is an illusion. The views of Libet and Wegner have much impact on the conception of the freeness of humans. Their arguments seem to be convincing that humans may not be free after all.

The Conversation

The dialogue below will help us understand Libet's and Wegner's views on free will with regard to looking at the issue of control and initiation.

Libet: Knock! Knock!

Wegner: Come in, Libet.

Libet: For a second, I thought the door was automatic as it surprisingly opened after I had thought to open it.

Wegner: Do not bother, I was opening it while you were about to enter. Well, how have you been?

Libet: Hmm! I have doubts about my feelings; I cannot say whether I am really ok or not. I know my subjective experience could be drawing to my awareness of my immediate feelings. But I could be mistaken too.

Wegner: At least, you are alive.

Libet: Ha-ha.

Wegner: I have also wondered whether we are the ones in control of the things we do when we think we are doing them.

Libet: You mean to say it could be that we are conscious of the control of our bodily actions when, indeed, we are not in control?

Wegner: Exactly!

Libet: Well, I can confirm that there are cerebral activities that occur prior to our intentions to act.

Wegner: Yes, I agree. This unconscious cerebral process, I believe, may be responsible for controlling our actions. I just do not believe that we could be certain with the causal mental process leading to actions. Because, at certain times in our conscious state, we are oblivious of our mental operations. Mental activities just happen, and we immediately know them, but we do not know how. We are not in control.

Libet: Is that really so?

Wegner: Yes! Our conscious feel of willing has no surety. Our minds put us to the deception that we are free; meanwhile, it is the assumed force of the will that makes us feel like our thoughts produce our actions.

Libet: Wow! That is intriguing. I beg to differ. Even though our voluntary acts are preceded by some unconscious cerebral processes that seem to end in the execution of an act, we can still control the outcome of events. There is a window opportunity that allows the conscious self to veto an act by either continuing the act or not. However, whether we are free or not, we do not know. Nevertheless, I think we should believe ourselves to be free since it will not be permissible to reduce our beingness to a robotic state.

Libet and Wegner remain sceptical of the reality of human free will. Libet has an optimistic attitude to human freedom, and the fact that humans can veto their decision points to a chance of human influence.

However, Wegner appears with a pessimistic attitude, where he sees the self be in a deceptive state with an unaware lack of control.

Wegner's illusory claim on the conscious will points to an epiphenomenal feature of humankind. This is such that the conscious will has no causal potency. While Wegner argues for a theory of apparent mental causation that describes human deception on their will's causal influence, Libet argues that such a theory on free will should be investigated and passed through a falsification process as recommended by Karl Popper.

The discussions on free will by Libet and Wegner have been alarming by far as they contradict the conviction many people hold of their actions¹. Libet's and Wegner's argument intends to expose our lack of initiation and inadequate control often when we strongly believe we act freely. Their remarks, already, seem to deny the conventional notion of free will any plausibility.

Conclusion

While Libet establishes a significant work to prove the unconscious cerebral initiation of action in the human brain, Wegner absolutely casts the conscious will (commonly believed by free will advocates to cause free act) as a figment of the brain and the mind's illusive manifestation. Aside from some possible philosophical gaps² that expose the incompleteness of the cognitive neuroscientific attempt to resolve the mystery of free will, Libet's and Wegner's works have immensely added to the study of our biological system and the actions we perform. Libet's studies express our physical limitation in the brain which is characterised by some periodical cognitive involvement. Wegner also establishes that the human involvement in action initiation and control is cognitively inefficacious. Their theses purport that we are neurobiologically determined. Thus, our neurobiological makeup permits only the possible things humans can do. And if this neurobiological determinism were true, then the brain is in control and not the self, then the illusoriness that Wegner claims is highly probable, then we can as well accept that the readiness potential which is realised to precede the will cause the will. These compelling arguments by cognitive neuroscientists do not allow any tolerance for the conventional notion of free will.

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¹ (Mele, 2008)

² possible issues of vagueness by the meaning of consciousness and hasty generalization associated with Libet's generalization from particular instances

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