

## **The Impact of Neuroscience on the Free Will Debate**

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### **I. Introduction**

The free will debate is locked in a stalemate that has persisted ever since the basic tenets of the three primary competing positions—compatibilism, libertarianism, and skepticism—were laid down.<sup>1</sup> To date, philosophers' attempts to break this stalemate have met with little if any success. Recently, however, the traditional approach of addressing the issue of free will from a more or less strictly theoretical standpoint has given way to approaches that incorporate a more empirical perspective (e.g., Wegner 2002, Dennett 2003, Nahmias et al. 2005). As empirical disciplines such as neuroscience and psychology continue to demystify the human mind by revealing the science behind consciousness and human decision-making, philosophers have been forced to reassess the subject of free will in light of this new information. While most philosophers seem willing to agree that neuroscience research has strong implications for the free will question, there is significant disagreement as to what the implications are. Philosophers are particularly divided over what conclusions should be drawn from Benjamin Libet's (1985) experiments indicating that automatic unconscious brain processes are responsible for producing the behaviors performed by test subjects. Much recent discussion has centered around psychologist Daniel Wegner, who argues that such experiments cast doubt on the ability of our consciousness to play any role whatsoever in producing our behaviors. Since philosophers tend to believe that free will requires that conscious decision-making plays some role in generating actions, many believe that Wegner's conclusion, if true, would render free will impossible for human beings. In their efforts to defend free will, some philosophers have argued that neither Libet's experiments nor other recent discoveries in neuroscience have demonstrated that consciousness is causally inert. Though this paper addresses whether Wegner's conclusions about consciousness are justified by contemporary neuroscience, my primary aim is to assess whether or not the evidence used by Wegner to challenge the causal efficacy of conscious will serves to undermine the belief in free will. To this end, I consider two of the most formidable defenses of free will against the threat offered by Wegner's analysis. These defenses are notable in that they employ different approaches in attempting to head off this threat. On the one hand, Eddy Nahmias relies heavily on empirical arguments to challenge Wegner's claim that neuroscience indicates that consciousness does not have any causal power over our actions. In contrast, Daniel

Dennett's defense of free will against Wegner's claims is based on a conceptual point about how Wegner (as well as Libet) are operating under a mistaken notion of *self*. After ultimately rejecting the specific defenses of free will given by both Nahmias and Dennett, I conclude by assessing whether either of the types of approaches used by these philosophers might eventually yield a viable defense of free will in light of the challenges brought on by neuroscience.

## II. Nahmias's Account of When Consciousness Matters

Before moving on to discuss Wegner and his critics, a few comments about the term "free will" are in order. While philosophers differ as to what "free will" means (the debate between compatibilists and incompatibilists bears this out), it is fair to say that there are certain core properties of the concept that they virtually all agree on. One is that free will is necessary for moral responsibility, and hence, for moral rightness and wrongness. Another is that having acted of one's own free will requires that one exerted *control* over the action in question. Though the question of what exactly constitutes control is a contentious one, we can say, at the very least, that control over an action requires that the action is in some way the result of a *conscious decision*. Yet recent discoveries in neuroscience call into question whether our conscious decisions ever play a role in causing our behavior. For instance, in a series of experiments carried out by Libet (1985), brain activity that appeared to initiate the actions that subjects in the experiments undertook (in this case, finger-liftings) preceded subjects' reports of when they decided (i.e., consciously willed) to perform their particular actions. These results have led many to conclude that the brain activity that initiates actions occurs *prior* to any conscious decision to act.

Libet's studies led Wegner to conclude that conscious will is an illusion.<sup>2</sup> According to Wegner, our belief in conscious will arises when we discern a correlation between our perceived decision to act in a particular way and the subsequent performance of an action that is consistent with this perception. Despite this correlation, however, Wegner denies that conscious decision-making plays any role in generating behavior.<sup>3</sup> If Wegner is correct, the implications for free will seem pretty straightforward—no conscious will equals no free will. But is Wegner correct? Philosopher Eddy Nahmias believes that Wegner has overstated his conclusions. As he puts it, "[Wegner] has not shown that our conscious will is an illusion—at least not in the strong sense that says our conscious experience of willing our actions plays no causal role in how we act."<sup>4</sup> In what follows, I analyze Nahmias's critique of Wegner by focusing on the main arguments he employs to counter Wegner's claim that conscious will plays no role in causing our behavior. I argue that while Nahmias is correct in claiming that Wegner's arguments allow for the *possibility* that conscious will

plays a role in producing behavior, this role is not likely to be significant enough to serve as the basis of an adequate defense of free will against the threat posed by Wegner.

Nahmias's approach to refuting Wegner consists in providing three primary arguments for how the findings of contemporary neuroscience are compatible with the position that our consciousness plays a role in causing behavior. He believes that contemporary neuroscience leaves open the possibility that conscious will is causally efficacious in that it: (1) is capable of exercising a "veto power" over unconsciously initiated potential actions, (2) is able to form general plans of action that influence subsequent behaviors, and (3) exerts a direct cause on our specific actions in "normal" cases of behavior that are not captured well in a laboratory setting. In regards to claims one and three above, I argue that these are empirical claims for which Nahmias has provided very little, if any, empirical evidence. As for the second, I believe that even if conscious will was instrumental in forming the types of plans that Nahmias has in mind (which is itself a questionable empirical claim), this by itself would be insufficient to establish that conscious will has the kind of influence over our behavior that it would need in order for free will to be possible.

The first of Nahmias's aforementioned arguments pertains to Libet's claim that his studies indicate that we possess a veto power that serves to inhibit the behaviors that our brains would otherwise bring about.<sup>5</sup> Nahmias claims that, "There are several ways that conscious representations of future actions seem essential to the way we perform them. One involves inhibition."<sup>6</sup> While Libet believes that our conscious will does not initiate the neural precursors of behavior, he suggests that our conscious will is able to prevent such neural precursors from issuing in action. If it should turn out that conscious will does have the kind of veto power that he suggests, it would establish that consciousness has an important causal role to play in producing, or more accurately, modifying, our behavior. At this stage, however, this hypothesis lacks robust empirical support. For one thing, since Libet's subjects were instructed to veto their prepared finger-liftings ahead of time, there is the question of whether the initial brain activity that Libet recorded in cases of alleged vetoing represented the precursor to flex at a prearranged time that was subsequently vetoed (as Libet believed), or the precursor to *refrain from flexing* at the prearranged time. Furthermore, it seems odd that while brain activity precedes the conscious decision to perform a behavior like flexing one's finger, there would be no previous brain activity attending the conscious decision to veto. As Nahmias himself says, "anyone who is not a dualist should not be surprised that brain activity precedes conscious awareness."<sup>7</sup> But if Libet's interpretation of his experiments is correct, then there is no foregoing brain activity when it comes to consciously vetoing a plan to act at a prearranged time. While it is true that Wegner's claims do not preclude the possibility of the conscious will either adjusting or inhibiting the behaviors (or would-be behaviors) that are initiated by our brains, Nahmias has offered no compelling empirical evidence that such adjusting or

inhibiting actually occurs. At best then, we are left at an impasse regarding the notion that our conscious will possesses veto power.

Towards the end of his article, Nahmias remarks, “Indeed, the most obvious way that conscious will plays a causal role in behavior involves developing general goals or plans for behavior.”<sup>8</sup> While this may seem “obvious” from an intuitive standpoint, the case is far from clear that this is actually so. By “general goals or plans,” Nahmias is referring to phenomena like planning to propose marriage or planning to water the plants. Such phenomena do not include “the detailed behavior that will constitute the action.”<sup>9</sup> Even so, he seems to think that these general plans do (at least sometimes) have some causal influence over the actions we undertake. If this should turn out to be correct, Nahmias believes that this would effectively refute Wegner’s claim that our conscious will plays no role whatsoever in generating our actions. Furthermore, he believes that it would help to establish the kind of conscious control over our actions that is necessary for free will. In what follows, I argue that there is reason for denying that our consciousness plays a causal role in generating general plans that have influence over our actions. And even if it did, this by itself would not establish that consciousness has the kind of influence over our actions that it would need in order for free will to be possible.

Let us assume for the sake of argument that our “general goals or plans for behavior” are instrumental in causing some of our actions. That is, let us assume that we are not misled about the causal force of these plans in the same way that we are apparently misled about conscious will being the causal force that instigates our specific behaviors. One question to ask is whether our conscious will is truly responsible for generating these general goals. Might it instead be the case that brain activity that is separate from any instantiation of conscious will instigates these general plans? After all, such a view fits well with the standard conclusion drawn from Libet’s experiments—namely, that the experience of conscious willing that immediately precedes our actions and which we take to be the cause of these actions does not, in fact, play a causal role in producing our actions. Rather, it is unconscious processes that serve as the proximal causes of these actions and are responsible for shaping the detailed characteristics of our behavior. (I will refer to this conclusion as the *Libet-Wegner Thesis*, or *L-W Thesis* for short.)<sup>10</sup> At the very least, it seems that an explanation is in order for why the conscious willing we perceive when performing specific actions is causally inert (assuming that it is), but the conscious willing we experience when forming a general plan of action is causally efficacious. Put another way, why should conscious will be necessary for producing general goals if it is not necessary for producing specific actions?

What Nahmias is doing here is attempting to salvage the causal efficacy of conscious will by attributing to it a causal power that is exercised prior to the apparently unconscious processes that prompt our actions. But in bringing the argument back a step in this way, he is open to the

objection that unconscious processes may be initiating these general plans as well. But there is a further difficulty he faces. Suppose *both* that our conscious will plays a role in bringing about our general plans *and* that these plans play a role in causing our behavior. How exactly such plans would cause behavior is not made clear by Nahmias. He gives a few examples of the kinds of general plans caused by conscious will that purportedly lead to actions, which include those that are formed “when we decide what to type, or that we will try to hit the fastball, or in the Libet experiment, that we will move our finger at some unspecified time.”<sup>11</sup> Presumably such general plans would incline us to perform a particular type of action, though we may ultimately fail to follow through on a general plan. After all, our general plans do not necessitate actions. Often times, perhaps even most of the time, we fail to act on our general plans of action.<sup>12</sup> Supposing, then, that our general plans merely incline us to behave in a certain way, is this enough to give us the free will that Nahmias is ultimately concerned with? There is reason to doubt this.

Consider two parallel worlds in which two individuals exist with the same general goal of robbing the local bank. This is to say that both individuals—under the current assumption of what a general goal is—are inclined to rob the bank. Suppose, further, that as both agents are standing outside the bank with the intention of robbing it (the proverbial “moment of truth”), the one agent’s brain (through no aid of conscious willing) makes him rob the bank while the other agent’s brain (again, without any causal influence from his conscious will) makes him disinclined to rob the bank, which causes him to return home without robbing the bank. Assuming that conscious will only played a role in developing a general plan of action for each of the agents—which was identical for both agents—can we say that the specific action that each agent performed (robbing the bank, returning home) issued from free will? Intuitively, the answer seems “no,” since the agents in the scenario had no control over their actions beyond formulating a general plan for action. Assuming that this conclusion is the correct one to draw, it follows that consciously willing a general plan for action that plays a role in causing an action is not sufficient for having free will.<sup>13</sup> Hence, something more than establishing that conscious will is capable of forming general plans that are causally efficacious seems needed to defend free will in light of the arguments presented by Wegner.

Were it true that conscious will played a causal role in creating general plans for action that influenced subsequent behaviors, this would apparently negate Wegner’s claim that conscious will plays no role whatsoever in causing our behaviors. However, showing that conscious will has this power is not what primarily concerns Nahmias or other philosophers. The primary question is whether conscious will is potent enough to allow people to exercise free will. The robber case demonstrates why empowering conscious will with the capacity to form general plans is not enough to establish the existence of the kind of free will that concerns most philosophers. To illustrate this point in a different way, let us recall that Nahmias uses the Libet experiments as an example of how

our conscious will can produce general plans for action that are causally efficacious. Even if we grant that consciously-willed general plans in the Libet experiments did play a causal role in bringing about the finger-liftings, it is difficult to see how the finger-liftings in these cases can be viewed as issuing from free will if conscious will only influences the subjects to lift a finger spontaneously at some unspecified time. After all, during the time at which the general plan is formed, the subjects presumably have no idea when a specific action will occur or what the precise nature of the action will be. (Will they raise it one inch off the table, two inches?) If the a person's conscious will only plays a role in producing a general plan of action, and not in producing the specific qualities that define the action itself (e.g., when, precisely, the action occurs), then it seems mistaken to think that conscious will can give us the control over our actions that is necessary for free will. As Nahmias himself says, "We [i.e., philosophers] generally agree...that free will requires...that we have conscious control over some of our actions *as we perform them* [my emphasis]."<sup>14</sup> Thus, merely having control over the formation of a general plan that gives rise to an action is not enough to establish that one has exercised free will when performing the action in question.<sup>15</sup>

The preceding quote by Nahmias hints at how he would likely respond to my claim that general plans of action, in themselves, do not provide us with the control that is necessary in order to have free will over our behavior. He would likely respond by saying that in normal types of cases, one's general plans often do continue to influence one's actions *as they are carried out*. It is this influence that our consciously-produced general plans have over some of our actions—so the argument goes—that makes free will possible. Assuming that Nahmias takes this view, it seems incumbent upon him to provide an explanation for how it is that a general plan can have such a strong influence over what we do. After all, the fact that many of our general plans fail to cause us to behave in accordance with them indicates that there is nothing inherent to them that enables them to exert this kind of influence over our specific actions. Consider again the Libet case—for which Nahmias believes general plans for action do influence subjects' behaviors. Given the standard explanation of the finger-liftings—namely, that unconscious processes determined the precise time (and, presumably, the precise nature) of these actions—it is difficult to see how any general plan to lift one's finger gave the subject *control* over the specific movements that occurred. Any control a subject might have had over her finger-liftings seems precluded by the unconscious processes that determined the specific nature of these movements.

Drawing from the preceding considerations, I contend that if the L-W Thesis provides an accurate account of all of our actions, and if the unconscious brain processes that cause our specific actions are not themselves controlled—in some robust sense—by whatever general plans for actions might exist, then it is impossible for us to have the kind of control over our actions that most philosophers deem as being necessary for free will.<sup>16</sup> Since, as Nahmias admits, general plans of

action do not entail the specifics of how a particular action is to be carried out, it seems mistaken to think that a general plan can control the unconscious processes that, according to the L-W Thesis, cause the specific characteristics of our behavior. Therefore, free will would seem to require the L-W Thesis to be false. In other words, it must be the case that consciousness plays a *direct role* in causing our specific actions (both in terms of when and how they occur). If this is true, then Nahmias's discussion of how conscious will is capable of forming general plans of action is irrelevant to the question of whether conscious will is powerful enough to make free will possible. What we need to know in order to answer this question is not whether conscious will plays a role in generating general plans, but whether it—as opposed to strictly unconscious brain processes—produces our specific behavior.

If the arguments I have given to this point are correct, then the success of Nahmias's efforts to defend free will against the claim that conscious will does not exert enough of an influence over our actions will depend on whether he has made a strong case for rejecting the L-W Thesis. In what follows, I argue that he has provided no such case. When considering the arguments Nahmias uses in order to discredit what I have called “the L-W Thesis,” it is important to acknowledge that in maintaining the falsity of this thesis Nahmias is making an *empirical* claim. On page 530, Nahmias states how the L-W Thesis “is an empirical claim about the timing of and the connections between events in the brain.”<sup>17</sup> Accordingly, any claim rejecting the L-W Thesis must also be an empirical one. This being so, it is appropriate to assess Nahmias's case against the L-W Thesis in terms of how well he is able to provide empirical support for his position.

Before discussing Nahmias's arguments against the L-W Thesis, let us first consider what might be said in favor of it. To begin with, the L-W Thesis has become essentially the consensus view among neuroscientists. As neuroscientists Michael S. Gazzaniga and Megan S. Steven put it, the view that “the brain carries out its work before one becomes consciously aware of a thought” is accepted by most neuroscientists.<sup>18</sup> But why has the L-W Thesis garnered so much favor among neuroscientists? Like all credible scientific hypotheses, this view is supported by a substantial collection of empirical evidence. More specifically, it is consistent with a wide variety of data (including results generated by Libet's experiments, brain stimulation cases, brain damage cases, and automatisms) indicating that there is a disconnect between our experience of conscious will and our behavior. While future research might ultimately disprove the L-W Thesis, the growing collection of research aimed at exploring the connection between consciousness and behavior is providing more and more support for it. One recent study (Soon et al., 2008)—based on experiments similar to those performed by Libet—found that researchers were able to predict subjects' behavior on the basis of brain signals before any conscious decision to act had been made. Perhaps even more striking is that the brain activity upon which the predictions were based occurred some *seven seconds*

before subjects became aware of making a conscious choice. This exceeds the fraction of a second that Libet's experiments measured between the brain activity and subjects' reports of their conscious decisions.<sup>19</sup>

While my discussion of support for the L-W Thesis was admittedly brief, I take it that it suffices to show that this thesis has concrete empirical evidence in its favor. What about Nahmias's case against it? One of the primary objections that Nahmias brings against Wegner is that he relies too heavily on special cases where conscious will and behavior come apart. While Nahmias allows that "there are various exceptions to the rule that our conscious experiences of our actions correspond with those actions," he contends that "the fact that there are these exceptions does not show that, in normal cases of correspondence, conscious will is causally irrelevant."<sup>20</sup> It is true that the kinds of cases Wegner relies on to support his position tend to involve unusual situations like brain damage, direct brain stimulation, and automatisms. Special as these cases might be, they do establish a key point that he is trying to make—namely, that people are sometimes mistaken when believing that their conscious will played a role in producing their behavior. While Nahmias contends that these special cases are significantly different from what normally occurs, he provides no hard empirical evidence for what is—as was pointed out earlier—an empirical claim.

In scientific practice, hypotheses are typically tested under "special" circumstances—that is, in a laboratory where an artificial (or "unusual") environment is useful for controlling certain variables and for generating conclusions that are taken to extend outside of the lab. Likewise, the cases that form the basis of Wegner's support for the L-W Thesis are useful *precisely because* of their unusual circumstances, which allow researchers to study the relationship between consciousness and behavior—a relationship that is difficult to study under "normal" circumstances. When seen in this light, Wegner's conclusion seems not only reasonable, but warranted as well. That is, since we are sometimes misled by strong intuitions into believing that our conscious will is responsible for generating actions, it is empirically plausible to believe on the basis of this fact—when taken together with corroborative research from a variety of scientific fields and without any substantial empirical evidence to support a contrary hypothesis—that we are always mistaken when believing that an action was caused by the experience of conscious willing that immediately preceded it. Rather than appealing to any hard empirical evidence to support his view that Wegner is confusing the "exceptions" with the "rule," Nahmias is simply relying on the strong *intuition* that conscious will normally plays a role in causing our behavior. But this won't do. Given that our intuitions about the alleged causal powers of our conscious will have been shown to be wrong again and again, demonstrating that conscious will has the kind of causal power that would falsify the L-W Thesis requires something more than merely relying on the *feeling* that it normally does.

In a recent interview, Martha Farah, a prominent neuroscientist, was asked whether it is proper to extrapolate the results from the Libet-like experiments conducted by Soon et al. (2008) to more complex decisions that we make outside of the lab. She responded—in the affirmative—by alluding to how scientists typically start out with simple experiments and observations made in a lab setting. They then develop working hypotheses based on these limited observations, which are then subsequently tested in more complex situations. These empirical tests ultimately decide which hypotheses should be accepted and which ones should be rejected. “Remember,” she says, “Galileo rolled balls down inclines and theorized about infinite frictionless planes; he didn’t set about trying to understand the fluttering zig-zagging motion of a falling leaf!”<sup>21</sup> Likewise, the kinds of experiments that Libet and others have conducted on the relationship between consciousness and actions have tended to revolve around simple actions.<sup>22</sup> While the L-W Thesis that is based on these kinds of experiments may well turn out to be false, it does have significant scientific evidence on its side. Beyond the Libet-type experiments, the notion that what we perceive as the conscious act of willing that immediately precedes our actions does not play a causal role in our behavior is supported by a wide variety of other empirical evidence (brain stimulations, etc.). As with the case of any other empirical hypothesis, rejecting it will require bringing to bear hard empirical evidence indicating that it is false. This is the kind of evidence that Nahmias has yet to provide. At this point, therefore, the L-W Thesis has more empirical support than the contrary thesis.

In the end, Nahmias is unable to fend off the threat to free will posed by Wegner. Even if one accepts Nahmias’s claim that conscious will produces general plans that play a causal role in our behavior—a position I have argued against—this would not address the biggest threat to free will stemming from Wegner’s ruminations on conscious will—namely, the L-W Thesis. It is certainly possible that this thesis is mistaken, and that subsequent research may vindicate Nahmias’s belief that conscious will does play an integral role in causing or modifying our actions. Absent such research, however, Nahmias’s case against the L-W Thesis is limited to an appeal to intuition—namely, the intuition that in “normal” cases where we experience conscious willing prior to performing an action, the willing seems to us to cause the action. If neuroscience shows us anything, however, it is the fallibility of our intuitions when it comes to understanding the origins of our actions.

### **III. Reinventing Your “Self,” Dennett-Style**

I have discussed how Nahmias’s failure to dispel the threat to free will posed by Wegner is due to his inability to effectively counter Wegner’s arguments for why conscious will is causally inert. A major flaw in Nahmias’s defense of free will is that he does not provide any empirical evidence to

support his empirical claim that the L-W Thesis offers an incorrect account of how our actions are generally produced. On the other hand, there is significant empirical evidence in favor of the L-W Thesis. Barring the kind of evidence that would challenge the L-W Thesis on empirical grounds, might there be another way to undermine the view that the L-W Thesis warrants taking a skeptical position on free will? One approach that may prove successful in alleviating the concerns about free will stemming from Wegner's attack on conscious will is that which is taken up by Daniel Dennett (2003). The main thrust of Dennett's response to Wegner is not to call the L-W Thesis into question.<sup>23</sup> Dennett believes that even if something like the L-W Thesis is true, this does not undermine the belief in free will. To understand Dennett's view, it is important to understand why someone might take the L-W Thesis to threaten free will in the first place. If one takes the truth of the L-W Thesis to imply that free will is illusory, one is probably operating under an assumption like the following:

*A*: In order for it to be correct to say that a person causes or controls a particular action of hers (a necessary condition for free will), it must be the case that the act of conscious willing that she takes to be causing the action in question (the moment of perception of conscious willing is denoted by Libet as time *t*) truly does play a causal role in producing the action.

This assumption holds that the power of the individual (or *self*) to produce her own actions in a way that renders free will possible requires that an act of conscious willing that corresponds to time *t* be causally efficacious. To demonstrate the causal inertness of any such act of willing is to render the self causally impotent and, therefore, to make free will impossible.

In Chapter Eight of his book *Freedom Evolves* (2003), Dennett sets out to undermine the assumption that I have labeled as *A* by rejecting the view that the self is best construed as being relegated to a particular subregion of the brain—namely, the part in which conscious awareness is usually assumed to occur. According to this view that Dennett rejects, it is in this “Cartesian Theater” within the brain—as Dennett eloquently refers to it—that *you* reside, becoming aware of your environment and making conscious decisions. In this sense, *you* are distinct from whatever unconscious processes might be operating in the background of your brain. The Libet experiments are troubling for this view since they apparently show that things distinct from your true self—namely, unconscious processes—are calling the shots when it comes to what you do. Dennett acknowledges that this notion of the true self being limited to an isolated control center within the brain reflects the commonsense understanding of ourselves, and is accepted—at least implicitly—by both Libet and Wegner.<sup>24</sup> Despite its popularity, Dennett believes that this view is mistaken. For Dennett, the self is best understood as an entity that is spread across the brain—both in time and

space—and includes both conscious and unconscious processes within the brain that are responsible for causing behavior.<sup>25</sup> With this broadened conception of the self in tow, Dennett believes he can eliminate the threat to free will posed by Libet's experiments. Since this extended sense of self includes the unconscious brain activity that preceded subjects' awareness of making a decision, it is no longer proper to view this unconscious activity as being a foreign cause of one's behavior. This is to say that free will no longer requires that decisions corresponding to time  $t$  have a causal influence over what we do. Under Dennett's expanded understanding of the self, the unconscious brain activity that initiates our actions are as much a part of the self as any decisions of which we are consciously aware.

While Dennett acknowledges that his conception of the self is significantly different from what most of us accept, he believes that adopting this expanded notion of the self is necessary if one aims to construct an account of free will and moral responsibility that is empirically defensible. Dennett believes that the account of free will that he defends is superior to those accounts that are dependent upon supernatural elements like an immaterial soul or a type of agency that operates outside the laws of physics. He contends that relinquishing one's belief in things like an immaterial soul should not be deemed problematic for the proponent of free will, since he thinks that the empirically-informed account of free will that he defends should satisfy anyone who values the concepts of free will and moral responsibility. As he says, "the varieties of free will I am defending are worth wanting precisely because they play all the *valuable* roles free will has been invoked to play."<sup>26</sup>

Before I discuss whether Dennett succeeds in his efforts to counter the challenges that Wegner's view poses for free will, it should be noted that his responses to Wegner do not turn on the claim that there is something *empirically flawed* about the L-W Thesis. Instead, Dennett's approach is to argue that inferring the impossibility of free will from the L-W Thesis results from a *conceptual flaw* that involves an improper understanding of the self. Once we see that the self is properly conceived as stretching beyond conscious awareness where its causal power is not limited to isolated moments (such as time  $t$ ), we will come to view the arguments of Wegner—as well as the experiments of Libet upon which Wegner's views are partially founded—as being innocuous to the belief in free will and moral responsibility.

Given that the self extends beyond isolated moments of conscious awareness to include unconscious processes that instigate our behavior, Dennett believes that the self can properly be held responsible for (and have free will over) actions that have unconscious origins. At this point a question arises as to whether Dennett's account of free will is too broad, in the sense that it would ascribe responsibility to agents who intuitively seem to lack it. Consider the case of someone who kills another while sleepwalking. This seems to be a case where we do not want to say that the killer

acted of his own free will, since he was not consciously aware of what he was doing. Yet under Dennett's account of free will, it is not obvious that we should deny that this individual acted freely and should be held morally responsible. After all, if we view the self—which grounds the concept of free will under Dennett's view—as including the sophisticated unconscious processes that initiate the everyday actions we undertake, why shouldn't the self also include the sophisticated unconscious processes that cause one to kill another in one's sleep?

In order to understand how Dennett would likely respond to this difficulty, it is important to realize that one of his primary aims—if not *the* primary aim—is to defend an account of genuine moral responsibility. The defense of free will he gives can be viewed as a means for establishing a philosophically defensible account of moral responsibility.<sup>27</sup> Dennett does not seek to justify the account of moral responsibility (or free will) that he favors by appealing to metaphysical issues involving quantum indeterminacies, immaterial souls, and the like. Instead, Dennett believes that moral responsibility is grounded in social and political factors that lead people to agree that there should be moral rules and that they should take responsibility for their actions. Even so, he believes that social and political factors can provide a legitimate justification for holding people genuinely morally culpable. What makes an individual genuinely morally culpable, for Dennett, is that one is willing (or should be willing) to acquiesce to punishment for having violated some standard of proper conduct. Dennett believes that such acquiescence would occur since rational individuals will agree that punishment is sometimes necessary to ensure that one can attain the kinds of benefits that society offers to citizens who behave properly.<sup>28</sup> Returning to the case of the sleepwalking killer, Dennett would likely say that the killer should not be held morally accountable since he would presumably not acquiesce to being punished for the act of killing. The reason he would not, we can assume, is that he believes that his act of killing fell outside of his control. As far as the question of free will is concerned, given that this individual would not (and should not) acquiesce to being punished for his act, Dennett would say that we should withhold from attributing to this individual the kind of free will that renders a person morally responsible.

While Dennett may be able to get around the difficulty of attributing free will and moral responsibility to individuals like the sleepwalking killer, his account of free will faces an even bigger problem. To understand the nature of this problem, it is necessary to consider the relationship between free will and moral responsibility in more detail. I have already touched on how philosophers take free will to be the basis of moral responsibility. It is in virtue of being capable of exercising one's free will that one becomes a proper subject for moral judgments. While this point is generally accepted by the vast majority of philosophers who discuss free will, there is an equally important assumption driving the free will debate that is less conspicuous, and which concerns the issue of what it means to be "morally responsible." I contend that at the heart of the philosophical

debate about free will is the view that to be morally responsible for an action implies that it is appropriate to either punish the person (if the act was immoral) or reward the person (if the act was moral) for the action on *strictly retributivist grounds*. In other words, moral responsibility justifies certain kinds of treatment on the grounds that such treatment is *deserved*, rather than whether such treatment may achieve a desirable utilitarian end. Though this conception of moral responsibility is not typically made explicit during philosophers' discussions of free will and moral responsibility, some philosophers who address these topics have drawn attention to it. For instance, the free will skeptic Galen Strawson has put the point as follows:

As I understand it, true moral responsibility is responsibility of such a kind that, if we have it, then it *makes sense*, at least, to suppose that it could be just to punish some of us with (eternal) torment in hell and reward others with (eternal) bliss in heaven.<sup>29</sup>

While free will libertarian Randolph Clarke rejects the conception of moral responsibility for human beings as justifying *eternal* rewards or punishments, his agreement with the idea that the concept of moral responsibility is tied to the retributivist notion of justice is apparent in the following passage:

Even if we lack heaven and hell responsibility, it remains vitally important to us whether we have a type of responsibility that is a genuine desert basis for various finite responses from other agents. It is important to us whether we are so justified in...punishing and rewarding each other.<sup>30</sup>

Yet it is not only incompatibilist philosophers who understand moral responsibility in terms of its connection to retributivist justice. John Martin Fischer—a prominent compatibilist—says that those who accept his position:

...need not etiolate or reconfigure the widespread and natural idea that individuals *morally deserve* to be treated harshly in certain circumstances...In my view, we care deeply about being robustly free and morally responsible, and it is not straightforward to reconfigure our ideas or practices so that we eliminate residual retributive components in our attitudes to ourselves and others.<sup>31</sup>

I contend that the question of whether or not retributivism is justifiable is one of primary forces—if not *the* primary force—driving the free will debate. After all, what, if not this issue, is at

the heart of the strong disagreement between compatibilists and free will skeptics (i.e., hard determinists)? Their disagreement does not seem to be based on a difference of opinion regarding the nature of the mind. Both skeptics and compatibilists generally accept the materialist nature of the mind endorsed by science. Nor does their disagreement seem to pertain to whether there is any basis whatsoever to dole out punishment or reward. It is open to compatibilists and skeptics alike to support systems of reward and punishment for *utilitarian* reasons. It should be mentioned that Dennett is one compatibilist who seems content with defending a kind of free will and moral responsibility that could justify punishment on strictly consequentialist grounds. Dennett reveals this sentiment in the following passage:

Why then do we want to hold people—ourselves included—responsible?...Instead of investigating, endlessly, in an attempt to *discover* whether or not a particular trait is of someone's making—instead of trying to assay exactly to what degree a particular self is self-made—we simply *hold* people responsible for their conduct (within limits we take care not to examine too closely). And we are rewarded for adopting this strategy by the higher proportion of “responsible” behavior we thereby inculcate.<sup>32</sup>

I concede that given Dennett's expanded concept of the self, it is possible to provide a convincing defense of a type of free will and moral responsibility that justifies utilitarian punishment. However, the significance of Dennett's victory comes at a great price. Namely, he has defined the concepts of “free will” and “moral responsibility” in such a way as to eliminate any substantive difference between the “compatibilist” position he defends and the hard determinist position that philosophers typically understand as being substantively different from compatibilism. As I alluded to earlier, both Dennett and the hard determinist are in agreement with seemingly all of the key issues (What is the proper basis for punishment? Does the mind have a materialist basis?) that have traditionally served to demarcate the positions among opponents in the free will debate. Thus, in redefining “free will” and “moral responsibility” in such a way that they could each apply to an agent whose actions are caused by purely unconscious processes, any disputes that Dennett would appear to have with hard determinists have become wholly verbal.<sup>33</sup>

Were it true that all compatibilists were interested merely in establishing a defense of free will that could justify a utilitarian model of punishment, I would argue that we ought to dispense completely with the distinction between compatibilism and hard determinism that has played such a prominent role in the philosophical debate regarding free will. I would also suggest in this case that in order to avoid confusion, compatibilists ought to forego asserting the existence of “free will” in humans, since: (1) their position does not appear to be significantly different from that of the hard

determinist who rejects the possibility of human free will, and (2) their sense of “free will” is significantly different from the term as it is used by libertarians.<sup>34</sup> However, since not all compatibilists reject the propriety of retributivist justice (e.g., Fischer), I would recommend that only Dennett-style compatibilists ought to refrain from asserting the existence of *genuine* free will. Nahmias, for one, appears to be a compatibilist of a different ilk than Dennett. The fact that he challenges Wegner’s arguments on largely empirical, as opposed to conceptual, grounds indicates that he is operating under different concepts of “free will” and “moral responsibility” than Dennett. After all, if he was merely interested in defending a kind of free will and moral responsibility that could justify utilitarian punishment, it is not clear why he should find Wegner’s arguments at all threatening. Even if one accepts the claim that conscious will is illusory, it is clear that certain types of treatment (both positive and negative) can bring about desired results. Hence, were it true that Nahmias was merely interested in defending the kind of free will that could ground the propriety of utilitarian-based punishment, attacking Wegner’s thesis on empirical grounds would appear unnecessary. Under such circumstances, he would seem better served by either adopting the conceptual approach taken by Dennett or—what I think would be better—dispense with defending free will altogether and adopt instead the kind of approach a hard determinist might take by providing a purely pragmatic defense of utilitarian punishment.<sup>35</sup>

If the disagreement between compatibilists and hard determinists is to be something other than a merely verbal one, I take it that the issue comes down (at least partly) to whether persons are sometimes deserving of particular types of treatment on purely retributivist grounds. A robust type of free will becomes relevant to this issue since it is what makes retributive treatment justifiable. Without it there can be no moral responsibility of the type that renders one genuinely *deserving* of certain kinds of treatment. Regardless of whether Dennett is interested merely in providing a justification for utilitarian rather than retributivist punishment, one might ask whether the kind of free will defense that Dennett offers could provide the kind of justification for the retributivist model of justice that many philosophers have sought. After all, he claims that the account of free will he offers can “play all the *valuable* roles free will has been traditionally invoked to play.”<sup>36</sup> Since much of the value that many philosophers place on free will is due to its being perceived as constituting a necessary condition for the propriety of retributivist justice, the truth of Dennett’s claim here would appear to depend partly on whether his account of free will can provide validation for the retributivist model of justice. In what follows, I discuss why Dennett’s account of free will is unable to succeed in this capacity.

The inability of Dennett’s account of free will to justify retributive treatment becomes apparent when we remember that genuine moral culpability under his view entails the willingness to acquiesce to the propriety of one’s own punishment. As he puts it, “Those who are competent

enough to appreciate the justification [for their own punishment], are unproblematic instances of culpable miscreants.”<sup>37</sup> But are such cases unproblematic? I maintain that such cases *are* problematic if we interpret “culpable” as meaning “deserving of retributivist punishment.” To see why, consider an example of a competent person who is raised in a caste system to believe that any non-royal individual who touches royal property ought to be put to death. Assume that this individual, who is a non-royal, whole-heartedly accepts both his place in society and its rules. One day, this individual becomes thirsty while walking near a river bank. He sees a non-distinguished looking cup by the bank and decides to use it to drink. Seemingly out of nowhere, the king’s guards come upon the non-royal and immediately accost him for touching the king’s lost cup. While the individual is dismayed at his bad luck, he agrees that rules must be followed, and acquiesces to be put to death. Even though he had no intention to “deface” royal property, he agrees that he committed a crime and deserves to be punished for it.

I assume that most readers will agree that the individual’s unwittingly coming into contact with royal property does not render him deserving of any kind of punishment, much less death. The fact that this individual does not appear to deserve any kind of punishment, even though he appears to fit the criteria of a genuinely morally culpable agent laid out by Dennett, indicates that the notion of genuine moral culpability that Dennett employs is insufficient for justifying retributivist punishment. As it turns out, nothing Dennett has said—regarding either free will or moral responsibility—seems capable of providing a legitimate grounding for retributivist justice. Although Dennett chooses to defend an account of moral responsibility that eschews a metaphysical justification in favor of a justification that is founded upon social and political factors, it seems impossible to defend the retributivist model of justice without addressing certain metaphysical questions such as whether one could have acted otherwise in a robust sense.<sup>38</sup> Ironically, the facet of Dennett’s view that seems to preclude him from providing a satisfactory defense of the retributivist model of justice (and, hence, a satisfactory defense of a robust kind of free will) is the very facet that he thinks can rescue free will from the threats posed by Libet and Wegner—namely, the rejection of the Cartesian notion of the self as being located in the brain’s “control room.” Dennett rejects the picture of, as he puts it, “an independent *res cogitans* that plays the role of Boss, or at least traffic cop and judge, in the swirling competition within the brain.”<sup>39</sup> This is the notion of the self that is threatened by Libet’s experiments, and Dennett’s attempt to salvage free will relies on a broadened sense of self that rejects this picture. But the key point here is that it is this Cartesian notion of the self—the self that is restricted to conscious awareness and which controls the milieu of desires, beliefs, etc., floating in the brain by making efficacious decisions at the point of action—that grounds our attitudes about the propriety of giving people their “just desserts.” It is this *self*—the boss in our brains who is calling the shots—that people want to hold accountable. In

supplanting the Cartesian sense of self that most of us have, Dennett may be able to construct an account of free will that stands impervious to Wegner's threats, but at the cost of leaving us with a type of free will (and moral responsibility) that is too weak to provide a legitimate philosophical grounding for the retributivist model of justice. But if I am correct in concluding that Dennett's account of free will is unable to perform this job, then Dennett is mistaken in thinking that the account of free will he has defended can accomplish *all* of the tasks that philosophers are looking for a satisfactory account of free will to do.

To sum up my response to Dennett, while it may be true that nothing that either Libet or Wegner has said poses a threat to "free will" understood in a very weak sense—namely, the sense in which it renders the utilitarian model of justice plausible—this is not likely to satisfy a significant number of philosophers (presumably *all* incompatibilists and many compatibilists) who believe that contemporary neuroscience poses a threat to free will and moral responsibility. The fact that Dennett's view is virtually indistinguishable from hard determinism illustrates why many philosophers are unlikely to find solace in his account of free will. I have argued that dispelling the threat against free will posed by Libet and Wegner requires a compelling explanation for why their insights do not discredit the retributivist model of justice that many philosophers see as being intrinsically linked to the concepts of free will and moral responsibility. It is the more robust type of "free will" and "moral responsibility"—i.e., the type that justifies retributivist punishment—that philosophers like Nahmias seem interested in defending, and which they take to be threatened by neuroscience. For reasons I have mentioned, however, Dennett is unable to defend this more robust conception of free will.

#### IV. Conclusion

In this paper, I have considered two different approaches that might be taken to head off the threat against free will posed by contemporary neuroscience—particularly the experiments of Libet in conjunction with Wegner's arguments for the inefficacy of conscious will. In Eddy Nahmias, we have a philosopher who employs a variety of *empirical* attacks against Wegner that seek to undermine his views about conscious will. Daniel Dennett, on the other hand, provides responses to Wegner that are more *conceptual* in nature, turning on a concept of "self" that is different from what most of us have. Though I have argued for why each of the particular approaches taken by these philosophers fails to provide an adequate defense of free will against the threats posed by Libet and Wegner, I believe that Nahmias's approach offers a greater potential for countering these types of threats. For example, while Nahmias may have failed in his attempts to refute the L-W Thesis, we can see how empirical evidence could ultimately succeed in undermining it. That is, we can imagine

that with more sophisticated equipment, we might ultimately discover that acts of conscious willing occur simultaneously with the earliest brain activity instigating our actions.

I am somewhat less keen about the prospects that an approach like Dennett's might have in countering the kinds of threats posed by Libet and Wegner. The free will debate is what it is in virtue of the meaning that philosophers have assigned to certain key concepts—concepts like *free will*, *moral responsibility*, *the ability to do otherwise*, and *self*. While the sort of conceptual analysis that is the bread and butter of philosophers often involves clarifying and revising the nature of the concepts involved in a particular issue, one has to be careful when attempting to defend one's position by radically revising the meaning of a concept that is integral to the issue under consideration. While such a revision may render one's position more coherent, it might ultimately eliminate a main point of contention among competing viewpoints without resolving it in a way that is philosophically satisfying. Should this occur, the issue at hand would essentially be cast off to the side with a verbal dispute appearing in its place. This is the kind of situation I believe would take place should philosophers adopt the revised notion of "self" that Dennett endorses. Though I will not argue for it, I am led to think that a similar result would occur should we radically revise any of the key concepts driving the free will debate. This is not to say necessarily that there is no need to revise any of the key concepts in the free will debate. However, one must be aware that in revising such concepts, one runs the risk of conceding the battle to the enemy. In as much as I believe that Dennett's revision of the concept of "self" renders providing a defensible account of retributivist justice impossible, I maintain that he has, however unwittingly, conceded the battle to hard determinists who maintain that human beings are incapable of exercising the kind of free will that is needed to legitimize the retributivist model of justice.

### Notes

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<sup>1</sup> *Compatibilists* hold free will to be compatible with the truth of causal determinism. *Incompatibilists* believe that free will is not possible if causal determinism is true. *Libertarians* are incompatibilists who maintain that human beings are capable of exercising free will. *Skeptics* are incompatibilists who deny the possibility that human beings can exercise free will.

<sup>2</sup> See D. Wegner, *The Illusion of Conscious Will* (Boston, MA: MIT Press, 2003) 342.

<sup>3</sup> See Wegner 63-64.

<sup>4</sup> E. Nahmias, "When Consciousness Matters: A Critical Review of Daniel Wegner's *The Illusion of Conscious Will*," *Philosophical Psychology* 15.4 (2002): 528

<sup>5</sup> See B. Libet, "Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action," *The Behavioral and Brain Sciences* 8 (1985): 538.

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<sup>6</sup> Nahmias 535-36

<sup>7</sup> Nahmias 532.

<sup>8</sup> Nahmias 536.

<sup>9</sup> Nahmias 536.

<sup>10</sup> I discuss evidence in favor of the *L-W Thesis* below.

<sup>11</sup> Nahmias 536.

<sup>12</sup> Taking just one of the examples of how we often fail to act on our general plans, consider how frequently people fail to follow through on their New Year's Resolutions.

<sup>13</sup> Keep in mind that this conclusion does not depend on it being true that unconscious processes determine our behaviors in the way that was depicted in the foregoing thought experiment. The point is simply that the fact that such unconscious process would, if true, seem to preclude free will over our actions shows that having conscious control over causally relevant general plans for action is not enough to give us the kind of free will that I believe most of us value.

<sup>14</sup> Nahmias 538.

<sup>15</sup> Although Nahmias could argue that we have free will over the "action" of forming these general plans, he would have to respond to the points I made earlier that call into question whether our conscious will actually does play a causal role in forming such plans. Furthermore, even if we possess this kind of free will involved with planning, it is free will in a very weak sense. What philosophers are primarily concerned about is whether human beings are capable of exhibiting free will in the performance (or non-performance) of *physical* actions (e.g., hitting someone, speaking falsely, rescuing a drowning child, etc.). Thus, if human free will should turn out to be limited to forming plans of action (or non-action), that either may or may not result in the actual performance or non-performance of a physical act, it is doubtful that defenders of free will would do much rejoicing. This is to say that it is unlikely that many philosophers would consider this kind of free will to be, in the words of Daniel Dennett, "worth wanting" (*Freedom Evolves* [New York: Viking, 2003] 224).

<sup>16</sup> Although, technically, establishing that the unconscious processes that cause our specific behavior are under our control via something other than general plans of action could salvage free will even if the L-W Thesis is true. However, given that it is unclear as to what might give us the kind of control over our actions that is necessary for free will other than either our general plans for action or our conscious decisions that immediately precede our actions, I will simply assume for the time being that a satisfactory defense of free will must make a persuasive case for why either the L-W Thesis is false or the unconscious processes responsible for our behaviors are under the control of our general plans for action.

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<sup>17</sup> Strictly speaking, Nahmias mentions this quote in referring to a view he has attributed to Wegner, which he has labeled “modular epiphenomenalism.” Modular epiphenomenalism can be understood as consisting of two theses: (1) Conscious will is a system in the brain that interprets our actions in terms of mental states such as desires, intentions, etc., and (2) The thoughts and intentions we experience immediately preceding our actions that we take to be the causes of our actions are not actually causally relevant—only unconscious processes are. In as much as the second thesis is essentially a restatement of the L-W Thesis, it is reasonable to expect that the empirical nature that Nahmias attributes to modular epiphenomenalism would also apply to its constitutive theses (and, therefore, to the L-W Thesis).

<sup>18</sup> M. Gazzaniga and M. Steven, “Neuroscience and the Law,” *Scientific American Mind Magazine* 16.1 (April 2005): 44. Among many other prominent neuroscientists who accept something like the L-W Thesis are Dick Passingham and Mark Hallett (see E. Youngsteadt, “Case Closed for Free Will?” *ScienceNow Daily News* 3 [April 14, 2008]), Martha Farah (see B. Keim, “Is Free Will and Illusion?” *Wired Magazine* [April 14, 2008]), and John-Dylan Haynes (see B. Keim, “Brain Scanners Can See Your Decisions Before You Make Them,” *Wired Magazine* [April 13, 2008]). It should be noted that while Passingham generally agrees with the L-W Thesis, he goes beyond Libet’s and Wegner’s idea that the brain activity that preceded subjects’ behaviors was merely the precursor to the actions. Instead, Passingham maintains that, “This activity that occurs earlier...really is a proper decision” (Youngsteadt).

<sup>19</sup> Incidentally, these results serve to undermine one of the ways that Nahmias attempts to discredit the L-W Thesis by pointing out the difficulty of trying to time the act of willing (see Nahmias 532). Presumably, Nahmias’s aim here is to call into question whether subjects’ brain activity in the Libet experiments really did precede subjects’ acts of willing. Since, the argument goes, there was a relatively short time between brain activity and subjects’ reported acts of willing, and given that the self-reports of willing may have been inaccurate (i.e., the acts of willing could have occurred earlier than reported), the claim that brain activity preceded the acts of willing may have been false. The latest studies indicating that brain activity occurs substantially earlier than Libet maintained considerably weakens this line of argument.

<sup>20</sup> Nahmias 533. I am assuming here that by “normal cases of correspondence,” Nahmias is referring to everyday instances in which the experience of conscious willing immediately precedes an action that we interpret as having been caused by the perceived act of willing. This seems the most likely interpretation.

<sup>21</sup> Keim, “Is Free Will an Illusion?”

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<sup>22</sup> However, as neuroscientist John-Dylan Haynes points out, there are plans in the works to conduct Libet-style experiments involving more complex choices such as “what to drink or what game to watch” (Youngsteadt).

<sup>23</sup> Though it should be mentioned that Dennett does attempt—albeit briefly—to challenge the L-W Thesis on empirical grounds (*Freedom Evolves*, 240-41). Since this line of attack basically calls into question the accuracy of subjects’ reports of when their conscious decisions occurred, I believe Dennett’s argument fails for the same reason that the similar line of argument provided by Nahmias fails. (See endnote 18.)

<sup>24</sup> Dennett’s acknowledgment that most of us accept something like the “Cartesian Theater” understanding of the self is implicit on page 249 of *Freedom Evolves* when he describes the Self as that “which appears to reside in a place in the brain, the Cartesian Theater, providing a limited, metaphorical outlook on what’s going on in our brains.”

<sup>25</sup> See Dennett, *Freedom Evolves*, 242.

<sup>26</sup> Dennett, *Freedom Evolves*, 225.

<sup>27</sup> Recall that free will is generally acknowledged by philosophers as being necessary for moral responsibility.

<sup>28</sup> Dennett’s discussion of acquiescence as being the key to genuine moral culpability appears in Chapter 10 of *Freedom Evolves*.

<sup>29</sup> G. Strawson, “The Impossibility of Moral Responsibility,” *Philosophical Studies* 75.1-2 (1994): 9.

<sup>30</sup> R. Clarke, “On an Argument for the Impossibility of Moral Responsibility,” *Midwest Studies in Philosophy* 29 (2005): 21.

<sup>31</sup> J. M. Fischer et al., *Four Views on Free Will* (Malden, MA: Wiley-Blackwell, 2007) 82.

<sup>32</sup> D. Dennett, *Elbow Room* (Boston, MA: MIT Press, 1984) 164.

<sup>33</sup> Dennett himself alludes to the possibility that any distinctions between the hard determinist’s position and his own view are strictly verbal. In *Freedom Evolves*, he acknowledges that should a hard determinist accept the plausibility of the kind of moral outlook that Dennett defends—i.e., where moral responsibility is cashed out in terms of the propriety of utilitarian punishment/reward—the hard determinist’s position would be “only terminologically different from [Dennett-style] *compatibilism*” (97-98).

<sup>34</sup> I would also contend that “free will” in Dennett’s sense is also different from what non-philosophers believe. After all, given the fact that so many individuals accept the propriety of retributivist justice as well as the view that such justice can only be justifiably meted out to those who acted of their own free will, there is reason to believe that Dennett’s understanding of free will

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does not reflect the commonsense usage of the term. This, then, is another reason for Dennett to refrain from using the term “free will” in the sense that he does.

<sup>35</sup> Joshua Greene is one hard determinist who takes this kind of approach. See his *The Terrible, Horrible, No Good, Very Bad Truth about Morality and What to Do About It* (New York: Penguin, forthcoming).

<sup>36</sup> Dennett, *Freedom Evolves*, 225.

<sup>37</sup> Dennett, *Freedom Evolves*, 298.

<sup>38</sup> While Dennett does put forth an account of *could have done otherwise* (see *Freedom Evolves* 296-300), his account of what gives one the ability to do otherwise is dependent not upon any metaphysical factors, but rather whether one is willing (or should be willing) to acquiesce to punishment in the way I have discussed. Given my arguments for why this kind of acquiescence is insufficient for justifying retributive treatment, I contend that the account of *could have done otherwise* that Dennett provides is not robust enough to ground the propriety of retributivist justice.

<sup>39</sup> Dennett, *Freedom Evolves*, 285.

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