

# Theism, Compatibilism and Neurodeterminism: *A Response to Marcel Sarot*

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## ABSTRACT

Christian theology affirms that humans are free. In his paper ‘Christian Faith, Free Will and Neuroscience,’ Marcel Sarot defends the view that libertarianism is the best account of our freedom and argues that recent results of neuroscience are compatible with libertarianism. Although I am sympathetic towards his latter conclusion, I am not as sure about the former. My paper discusses some of Sarot’s arguments and maintains that theists might still have some good reasons to be compatibilists. Theological reasons for compatibilism have to do with traditional doctrines of providence, grace and human sinfulness. Certain solutions to the problem of free will and foreknowledge also suggest compatibilism. Philosophically, libertarianism suffers from problems that have to do with reasons causing actions. Furthermore, the paper also provides some reasons to think that the results of neuroscience are, for the most part, irrelevant for assessing whether we are free in the compatibilist or libertarian sense. This is because neuroscience seems to be unable to give us evidence that neuroscientific / psychological laws are universal or exceptionless.

## KEYWORDS

free will, neuroscience, theism, compatibilism, determinism, libertarianism

I take it that Christian theology affirms human free will and moral responsibility. Thus, Christians need to reject all views that entail either *hard determinism* or *fatalism*. If hard determinism is true, we have no free will or moral responsibility. If fatalism is true, there is nothing we can do to influence how the future will turn out. Against these views, Christian theologians affirm that we are indeed responsible and free and can influence the future. Now, two questions are before us: first, do we need libertarian free will to account for what Christians affirm or is compatibilism enough; and second, will neuroscience make any difference in this issue.

In his paper, *Christian Faith, Free Will and Neuroscience*, prof. Marcel Sarot argues that we need not give up our belief in libertarian freedom because of theological or neuroscientific reasons. On the theological side, he argues that God's providence and foreknowledge do not conflict with libertarian free will. With respect to foreknowledge, he adopts the Open Theist position: namely, that propositions about future free actions do not have truth-values, so even God cannot know them. On the scientific side, according to him, one major reason for rejecting libertarian free will is the work of Benjamin Libet (and other neuroscientists). He then presents arguments for the conclusion that Libet's experiments only deal with actions that are morally irrelevant; morally relevant actions, Sarot claims, are much more complicated than the actions that Libet studies, so Libet's experiments say very little about moral responsibility. Major threats to libertarian free will are thus removed.

Although I agree with the general thrust of Sarot's paper – especially his criticisms of Libet's experiments and their interpretation – I am prepared to play the devil's advocate here. I will argue that Sarot lets the libertarian off the hook a bit too easily and simplifies the compatibilist position unjustifiably. So, I think that a much stronger case for theistic compatibilism can be made – a case that is not so easily defeated. I will not present a complete case for Christian compatibilism here, but I will be presenting some reasons for it.

Before I go on, I want to say that I am not a card-carrying Christian compatibilist (or at least not yet). But I do think that there are some good reasons for Christians to be compatibilists and that there are good arguments against theistic libertarianism. I also want to highlight the fact that neuroscience does *not*, I think, feature in these arguments. Whether these arguments – all things considered – warrant compatibilism over libertarianism or whether the libertarian position could be formulated in such a way to make it immune to criticisms I will present I am not sure.

My article has three parts. In the first part, I will argue that there are some theological reasons for compatibilism. These reasons have to do with providence, grace and human sin. Further, I will present some criticisms of Sarot's solution to the problem of free will and foreknowledge. In the second part, I will take issue with some of the more philosophical aspects of Sarot's libertarianism. Sarot has failed to discuss the biggest obstacle to a libertarian theory of free will, the issue of randomness or arbitrariness. Finally, in the third part I will present some arguments in support of Sarot's position on neuroscience and determinism.

### 1. DEFINITIONS

As I said, the contest is in between libertarians and compatibilists. For the sake of clarity, let me briefly say what I mean by these views.<sup>1</sup>

First of all, determinism is the view that for any S's action A (or choice or decision) at some time is necessitated by antecedent factors. What is meant by 'necessitated' here is that there are some conditions such that if those conditions occur, then S's action A will always occur. In other words, the conditions – whatever they are – make it necessary for S's action A to occur.

This way of defining determinism has the benefit of being rather liberal as to what the necessitating antecedent factors are. In the scientific case, these factors would be antecedent physical events and physical laws, but there might be other conditions as well. More specifically, some neuroscientists think that our actions are not necessitated by general physical laws and events, but instead our brain events and laws governing those events. Finally, a religious person could believe that there is a God that necessitates our actions. Or one might believe in some other, non-personal force, like fate. Let us call these views *scientific determinism*, *neurodeterminism* and *theological determinism* respectively.<sup>2</sup>

Generally speaking, a *compatibilist* claims that for S to be free and morally responsible in performing action A is compatible with action A being ultimately caused by factors outside S's control. In other words, despite the fact that our actions and choices are caused by factors outside our influence,

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<sup>1</sup> My basic definitions draw more or less from Robert Kane, *A Contemporary Introduction to Free Will* (New York 2005) and the introduction to Robert Kane (ed.), *The Oxford Handbook of Free Will* (Oxford 2011).

<sup>2</sup> Notice, that these three types of determinism are independent of each other.

let us say our brain states plus psychological laws, we are still free and morally responsible. Of course, some causes remove moral responsibility – let us say external coercion or some other external constraint – but other causes do not. These causes are usually understood to involve the subject’s own reasons and desires for acting. Furthermore, the compatibilist has to deny that for S’s action A to be free, S had a power to do action B instead of A. In other words, S’s action A can be considered free even when S could not have done otherwise. This is why the compatibilist thinks that freedom and determinism are compatible.

Equally roughly, a *libertarian* argues that for S to be free and morally responsible for performing action A is incompatible with action A being ultimately caused by factors outside S’s control. In other words, in order to be free and responsible for A, S has to be in some sense control of the factors that ultimately cause A. Thus, most libertarians affirm that free actions are indeed caused, but those causes are such that they themselves are under the control of the agent. A libertarian would say that although my reasons for acting cause my actions in some particular situation, I could reflect and change my beliefs that constitute my reasons for acting. Further, a libertarian insists that free actions require the power to do otherwise. If determinism of any kind is true, then S could have not done otherwise. Since freedom requires the power to do otherwise and determinism entails that S cannot do otherwise, determinism is incompatible with freedom.

## 2. THEOLOGICAL REASONS FOR COMPATIBILISM

Sarot seems to think that libertarianism is required to make sense of the core Christian conviction that human beings are free. What I find surprising, however, is how easily Sarot rejects the theological case for compatibilism. I think the theological case for compatibilist free will is rather strong. Compatibilism (or something like it) is, after all, a venerable Christian tradition. Theologians, such as Augustine, Luther, Aquinas and Calvin are much closer to compatibilism than libertarianism. One reason for this is that all these thinkers are *theological determinists* of some kind or another. Further, embracing compatibilism would solve many problems that have to do with providence, predestination and God’s foreknowledge.

In what follows, I will briefly discuss two topics: first, I will give some reasons to think that traditional Augustinian-Lutheran views of providence, grace and sin suggest compatibilism (or at least do not require libertarianism);

second, I will present a few arguments against Open Theism and its view about God's foreknowledge and providence.

### 2.1. PROVIDENCE, GRACE AND PREDESTINATION

I was surprised by Sarot's claim that neither providence nor predestination present problems to libertarian free will. With respect to predestination, he does not even give an argument for his conclusion. Contrary to this, it seems to me that classical ideas of providence and the justification by grace strongly suggest, a compatibilist notion of free will.<sup>3</sup>

Since I have little space, let me just talk about Luther here. I am no Luther-scholar so permit me to simply quote one:

Luther asserted God's complete freedom and complete control of his creation, his total responsibility for all that happens within it. God has predestined and provides for all his creatures according to his decisions, conditioned by nothing else. Nothing impedes or impairs the power of his will to make happen what he has decided. Preparing to treat human creatures as totally responsible within the sphere God gives them, Luther did not flinch before the logical necessity of the Almighty Creator's being totally responsible for all things. Luther was determined to hold these two total responsibilities in tension and not harmonize or homogenize them, as had his teachers. Therefore, he rejected their finely honed logical distinctions framing God's almighty power with the maneuvering room of contingency, which permitted human freedom. God's 'immutable, eternal, and infallible will' foresees, plans, and enacts all things that ensue in the course of creation. His foreknowledge is creative and determinative, not passively observing human actions and decisions but governing and affecting their thoughts and actions.<sup>4</sup>

For Luther, it seems that the causal influence of God necessitates human action and thinking so as to remove the power to do otherwise, but he still maintain that humans are free in the space that God has given them. Recall that libertarian free will entails the power to do otherwise. For Luther, such a power seems impossible: God determines everything, including our wills. Since Luther nevertheless maintains that humans are morally responsible, his freedom is surely of the compatibilist kind.

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<sup>3</sup> Such a case is made more comprehensively in Lynne Rudder Baker, 'Why Christians Should not Be Libertarians: An Augustinian Challenge,' *Faith and Philosophy* 20 (2003), 460-478. See also the response, Kevin Timpe, 'Why Christians Might Be Libertarians: A Response to Lynne Rudder Baker,' *Philosophia Christi* 6 (2004), 279-288.

<sup>4</sup> Robert Kolb, *Martin Luther: Confessor of Faith* (Oxford 2009), chapter 6.

We can put the problem in the form of a brief argument. Let us imagine that God's providential plan for the world entails that I become a good person. God being omnipotent and being in full providential control I cannot choose to act against God's plan. Thus, given that libertarian freedom requires the power to do otherwise, I am not free regarding whether I will become a good person or a bad person. Further, I am neither morally responsible nor praiseworthy when I finally become a good person. So, I think that there is a dilemma here for the libertarian. Either (1) the libertarian has to give up the notion that freedom requires the power to do otherwise and become a compatibilist; (2) loosen God's providential control of the creation, or (3) try to combine libertarian free will with God's providential control in some roundabout way. Something is got to give here. Given what Sarot says about providence, I take it that he goes with (2), that is, loosening God's providential control over creation.

A similar dilemma emerges in the case of grace and salvation. Luther argued in his *De Servo Arbitrio* against Erasmus that if humans have libertarian free will, they could resist God's providential plans and possibly reject or earn God's grace. For Luther as for Augustine, earning God's grace through human actions is a non-Biblical idea. God's grace is a pure gift that requires nothing from the recipient. If it did so, it would not be a free gift. Taking a strong stance on original sin, Luther argued that it is impossible for humans even to turn towards God without God first causing their will to act this way. So no previous act of will to turn towards God is even possible for sinful humans. Contrary to Luther, Erasmus insisted that although humans cannot by their own will save themselves, the human will can co-operate with God's grace in order to cause salvation.

So, the dispute between Erasmus and Luther was between these two theses (among other things):

1. Luther: God's unwarranted grace is both necessary and sufficient for salvation. No libertarian act of the will is needed.
2. Erasmus: God's unwarranted grace is necessary but not sufficient for salvation. A libertarian act of the will is needed.

Notice, that both of these views are orthodox, as I understand orthodoxy. Both rule out what I take to be the Pelagian position:

1. Pelagius: God's unwarranted grace is neither necessary nor sufficient for salvation. Libertarian actions are enough.

Notice, that if (1) is correct and the power to do otherwise is required for freedom, then none of us is free or morally responsible for our salvation or the lack of it. The argument can be put, very roughly, like this. If I am predestined to heaven, there is nothing I can do to prevent this. I cannot choose not to go to heaven. Thus, my going to heaven or hell is not under my control, nor have I the power to choose otherwise. There is nothing we can do to change God's plan to save (or not to save) us. This conclusion, it seems to me, entails the doctrine of double predestination and the rejection of libertarian free will. Again, the libertarian is faced with a dilemma here. They either need to go with Erasmus and concede that at least some libertarian acts are required for salvation or go with Luther and reject the idea that freedom requires the power to do otherwise *and* accept double predestination.

## 2.2. SOME PROBLEMS IN OPEN THEISM

Sarot wisely distinguishes the issues of providence and predestination from the issue of God's foreknowledge. Sarot wants to solve the problem of freedom and foreknowledge by adopting Open Theism. According to Open Theism, God is everlasting, not timeless, and has limited knowledge of the future, especially about future contingent events, such as free actions. God can, however, predict what is going to happen, but he cannot know it. For the Open Theist, this does not hinder God's omniscience, because there are no truths to be known about future contingent events.<sup>5</sup>

Despite its relative popularity, Open Theism has various problems. Instead of developing them fully, I will simply mention a few. The first is, of course, that it is an innovation: the traditional view is that God is atemporal or eternal and has full knowledge and providential control over the past, present and future. Further, on the Open Theist view, God would be subject to change and influence from the outside through our actions and the increase and decrease of His knowledge. God would also need to be complex for these reasons. For the classical theist, none of the above is acceptable. But going against the tradition might not be that bad, especially if you have good reasons for it.

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<sup>5</sup> For a sophisticated version of Open Theism, see, e.g., William Hasker, *Providence, Evil and the Openness of God* (London 2004).

Second, on Open Theism, some of God's beliefs could end up being false. Indeed, this is rather likely.<sup>6</sup> God's beliefs about the future are based on the knowledge that He now has. God can know a lot about the future by predicting on the basis of His full knowledge of the present. This way God knows truths about what free beings are likely to do in the future and what contingent events are likely to occur. But given that there is an infinite set of libertarian free actions that free beings could do in the future, it is likely that a small subset of God's beliefs about what free beings do in the future turn out to be false when the time comes. So it seems that the Open Theist has to accept that God has false beliefs. But this is problematic. First of all, it flies against the face of the tradition of omniscience. Second, the opponent of Open Theism is now free to argue that it is possible that a being exists who does not have false beliefs but is in all other ways similar to the God of Open Theism. Thus, the God of Open Theism would no longer be the most perfect being.

Third, the claim that propositions about future contingent events have no truth-values is contested among philosophers. The main reason for this is that if this is true, we can have no knowledge about future actions or contingent events. If there is no truth to be known about whether I will go to the bar tomorrow, I cannot now know whether I will go to the bar tomorrow. This is a high price to pay. However, the Open Theist might have a response here: William Hasker, for instance, has argued that propositions about future free actions do have truth-value, but the truth-value is in principle unknowable before the time of the action. This seems to me to be a more promising avenue for the Open Theist to take.

Finally, Open Theism has problems with God's providence. For the Open Theist, God is like a chess master playing against a novice. The master does not know what the novice is going to do, but he has a plan for every possible contingency. No matter what the novice does, the master can counter that and win. Now, the problem is that this is not certain. It is not metaphysically impossible for the novice to win against the master. In the case of the God of Open Theism, it is possible that His plans for saving me are thwarted because of the choices that other people make. This seems very unlikely but it is not impossible. Although God can control events, the inherent contingency of the world can, in principle, prevent his plans coming into fruition. The Open

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<sup>6</sup>This argument was originally put forward by Alexander Pruss. See his weblog: <http://alexanderpruss.blogspot.co.uk/2010/10/open-theism-and-divine-error.html>

Theists must acknowledge that their God is a *risk-taker* and that his plans are not necessarily realised.

### 3. PHILOSOPHICAL ISSUES WITH LIBERTARIANISM

I have now given a few theological reasons for compatibilism and discussed some problems with libertarianism. In what follows, I will discuss a few philosophical issues that have to do with compatibilism and libertarianism. I do this because I think that Sarot has neglected a few good philosophical arguments for compatibilism and also failed to discuss some of the central problems of libertarianism.

As I said before, a decent theological case for compatibilist free will can be made. The question then is whether there are insurmountable philosophical barriers to overcome. Most contemporary philosophers do not seem to think so. Almost 60% of contemporary analytic philosophers accept compatibilism – the claim that determinism and freedom and moral responsibility are compatible.<sup>7</sup> If some compatibilist position is workable, and I think that at least some of them are, this would clearly support the case for theistic compatibilism.

#### 3.1. COMPATIBILISM AND THE POWER TO DO OTHERWISE

I think Sarot might not be challenging the strongest forms of compatibilism. When he describes compatibilism, he presents it as a view according to which an action is free if it proceeds from a person's desires and is not subject to external constraints. This is the view of *classical compatibilism*. He then claims that classical compatibilism is not enough for moral responsibility. But this is something that most contemporary compatibilists would agree with anyway, so it is not enough to refute compatibilism as a whole.

So for the classical compatibilist, we are free to the extent that we have the power to do what we want and are not constrained by external factors. Notice how this way of defining freedom says nothing about alternative futures or the origins of our desires. But there is a well-known problem with classical compatibilism: it cannot accommodate compulsive, deviant or artificially engineered desires and motivations. On the classical compatibilist

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<sup>7</sup> The PhilPapers Survey: <http://philpapers.org/surveys/>.

analysis, a person who has been genetically engineered to wanting to become a fighter pilot would come out being free when becoming one. He is acting according to his desires and is not subject to some external constraint. But the problem is that his desires are manufactured for that very purpose. Our intuition is very strong on this: this person is not free when he decides and becomes a fighter pilot.

To distinguish such cases from genuine freedom, contemporary compatibilist have adopted a more nuanced idea of hierarchically ordered desires. These *new compatibilists* insist that it is not enough for freedom to have the power to act on one's desires; one also needs the power to reflect, evaluate and control one's own reasons and desires for acting. This involves making a distinction between first-order and second-order desires. In the case of our fighter pilot, the compatibilist can now insist that he is not free. It is true that in becoming a fighter pilot he is acting according to his desires, but he is unable to reflect upon the reasons for his actions and he lacks the power to control and shape them on the basis of his reflection. In other words, his first-order desires are not in control of his second-order desires. Thus, he lacks *rational self-control* and so is not free.

Notice that second-order desires and reflections can be causally necessitated by antecedent factors, which means that such an account is compatible with determinism. On the basis of such analysis, the compatibilist is able to give an account of reason or desire-based actions – an account that does not entail that the person has the power to do otherwise.

But for the libertarian, the power to do otherwise is necessary for freedom and responsibility. Surprisingly, Sarot claims that no good example of morally responsible action where the person lacks the power to do otherwise has been presented. I think this is false. I think there are rather good arguments for the conclusion that the power to do otherwise – *the principle of alternative possibilities* – is not necessary for moral responsibility.

A well know defender of compatibilism, Harry Frankfurt, has various examples, known as the *Frankfurt examples* that seek to establish this.<sup>8</sup> Let me simply adopt one. Suppose that Dr Jones wants his patient Mr Smith to kill one of their mutual acquaintances, Mr Black. When Mr Smith comes to Dr. Jones for brain surgery, Dr Jones installs a microchip in the head of Mr Smith. This microchip can detect the neural correlates of Mr Smith's decisions and direct them. Now, Dr Jones' plan is to send instructions to Mr Smith's

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<sup>8</sup> For discussion, see the essays in Part V of Kane, *Oxford Handbook*.

microchip as to make him kill their acquaintance, Mr Black, when they next meet. But when they meet the next time, Mr Smith has himself decided to kill Mr Black. Dr Jones then does not need to exert control over Mr Smith via the microchip and is happy when Smith kills Mr Black. Now, it is clear that Mr Smith does not have the power to do otherwise. He could not have decided not to kill Mr Black, because if he had tried, Dr Jones' microchip would have overridden his decision. Does this mean that Mr Smith is not morally responsible for killing Mr Black? It seems to me that it does not: Mr Smith killed Mr Black in cold blood without any external or internal compulsion. Yet, he could not have done otherwise. If this is correct and the power to do otherwise is not a necessary condition for moral responsibility and freedom, then the compatibilist is in the clear: he can say that an action is free when the action is caused by well-reflected desires and reasons of the subject.

### 3.2. LIBERTARIANISM, REASONS AND ARBITRARINESS

In addition to not backing up his claim that the power to do otherwise is necessary for freedom, Sarot does not give an account of how reasons cause actions in the libertarian scheme. For the compatibilist, free actions are those that are determined by properly reflected reasons and desires. For Sarot, a libertarian free decision cannot be causally necessitated by anything. But is it not the case that reasons for action are causal factors in our actions and decisions? The compatibilist can accuse the libertarian here as follows: if one's action is not causally necessitated by well-reflected reasons, then the action is random or arbitrary; it has no reason whatsoever.

Sarot says that libertarian actions are not arbitrary because they are actions of someone. But this is not enough to establish the conclusion that actions are not arbitrary. Arbitrary actions, it seems to me, are actions that are done by someone but without any reason. If an action is done without any reason, without any desire, it is hardly a free action, hardly an action at all. Sarot also says that non-arbitrary actions are explained by be the decision that the person makes. This is true, but, again, it is not enough to make the arbitrariness objection go away: we need a reason or an explanation for the decision that the person made. It is not the decision to act that removes randomness, but the fact that the decision is grounded in reasons and desires. As I already pointed out, the compatibilist can make sense of reasons and desires causing actions, but it seems that if Sarot claims that all antecedent conditions that cause our actions make those actions less free, for him having

reasons and desires for action actually take your freedom away. So if I have good reasons to act in a certain way, I am not really free in a libertarian sense. Surely, this cannot be the case.

Sarot could now respond in two ways. First, he could deny that reasons relate causally to our actions. Some libertarians do this and the result is called *non-causal libertarianism*. The problem here is that the non-causal libertarian has to account for reason-guided actions somehow without causation. Most philosophers think that this is extremely difficult and implausible. The arguments are in the literature, if anyone wants them.<sup>9</sup> But I do not think that Sarot wants to go this way. He might want to take the second route, namely, to argue that reasons do causally contribute to actions but they do not necessitate them. In other words, our reasons do operate as causal factors in our actions but they do not determine our actions. Fair enough, but I can still insist that the causal influence that the decision has on the action apart from reasons and desires is random. It must be, since Sarot has to insist that *they do not ultimately cause the decision*. Since he is an indeterminist, he must insist that there is a causal gap between whatever causes an action has and the decision to act. What the compatibilist can say here is whatever fills that gap is bound to be random and arbitrary.

Imagine a world in which you are faced with a choice. You have been offered a job in, let us say, Princeton University. You consider the reason for going and not going. For the libertarian who insists that a power to do otherwise is necessary, there must be one possible world in which you take the job and another in which you do not take it. But notice that these worlds are identical before the actual decision is made. In other words, at the moment of the decision you have access to exactly the same reasons and deliberations and have exactly the same desires, but in one world you choose differently than in the other. If this were not the case, there would be no causal gap between the decision and the action would not be a free action, as the libertarian understands it. But, as I pointed out, it is extremely difficult to see what could fill that gap, since it cannot be any reason or desire or a deliberation that the person has. What we have here is a metaphysically brute, non-grounded, non-caused decision.

What I am trying to say here is that if we endorse causal indeterminism, we have difficulties in explaining how our actions can be anything else than random or arbitrary. Causally indeterministic actions are not determined by

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<sup>9</sup> See, again, essays in Kane, *Oxford Handbook*.

anything apart from some kind of ungrounded decision. Notice that the causal indeterminist cannot simply resort to reasons here: if he did, he would no longer be an indeterminist. The compatibilist has no such problems, since, for him, actions are determined by people's desires and reasons for acting (among other things).

#### 4. AVOIDING NEURODETERMINISM: ALTERNATE ACCOUNTS

Finally, I want address the issue of neuroscience and determinism. Now, both Sarot and I agree that with respect to free will, there is a gap in science. The question is what kind of a gap this is. Sarot concludes that, as neuroscience currently stands, it does not explain morally relevant actions. Thus, there is no threat to libertarian free will. This, however, leaves open the possibility of the gap closing in the future. Sarot has given us no reason to think that neuroscience is unable to explain morally relevant actions and threaten free will in the future. In other words, some day a genius neuroscientist might come up with an experimental setting in which she could explain morally relevant actions. Sarot's position would be stronger if he could give a reason why this is unlikely or impossible. But he thinks that the issues surrounding free will and determinism might be, at least to some extent, empirically tractable.

I, on the contrary, think that there are some reasonably good arguments against such a conclusion. To be more specific, I think that there are some reasons to think that the issue of free will and determinism is not a scientific issue at all and that any amount of experimental data will not solve it. The first reason has to do with what the sciences of the mind are actually like and the second with the nature of freedom itself. But before I can get to these arguments, I will claim that the issue of neuroscientific determinism goes deeper than to Libet's experiments.

##### 4.1. NEURODETERMINISM: THE DEEP PROBLEM

Sarot identifies Benjamin Libet's studies as potentially problematic for libertarian free will. He then argues that they are only potentially problematic because they do not deal with morally relevant free actions. The problem, I think, goes much deeper than this. Not only are specific experiments in neuroscience problematic for libertarian free will, but also the whole thrust of the enterprise of neuroscience, if it is interpreted in a certain way. Libet's views

are only a symptom of a comprehensive view that many neuroscientists share. Here is one example by Colin Blakemore:

The human brain is a machine, which alone accounts for all our actions, our most private thoughts, our beliefs ... All our actions are products of the activity of our brain. It makes no sense (in scientific terms) to try to distinguish sharply between acts that result from conscious attention and those that result from our reflexes or are caused by disease or damage to the brain.<sup>10</sup>

The basic idea seems to be that there is a closed flow of physical events caused by other physical events in our brains. This is what neuroscience sees when it looks at the brain. It follows that an active self or any other process of conscious decision-making cannot influence what goes on in the brain. We see no selves actively controlling neural circuitry, no acts of the will, nothing like that. The conscious choice seems to be a mere epiphenomenon instead of being causally efficacious. Since freedom requires something like conscious decisions or choices to be found by neuroscience in the brain, free will is an illusion.

The problem can also be stated in a more philosophical way. Most contemporary neuroscientists and philosophers are *physicalists*. As physicalists, they believe that for all events there are sufficient physical causes (that is antecedent physical events governed by physical laws) for that event to occur. This thesis is usually called *the causal closure thesis*. It entails that an ideal science, complete and true physics, can explain all mental events and actions that are supposedly caused by those events in terms of physical interactions and physical laws that make no reference to any events or objects of mental kinds. If physicalism and the causal closure thesis are true, it seems that there can be no free will in the sense of the subject herself determining or causing her actions on the basis of her mental states. Instead, antecedent physical events and the universally quantifiable neuroscientific / psychological laws necessitate the mental states and actions of the subject.

#### 4.2. NEUROSCIENCE AND LAWS

Now, the question is whether neuroscience can ever tell us that neurodeterminism is true. In other words, could neuroscience tell us that antecedent brain states and universally quantifiable neuroscientific / psychological laws determine all human actions? I, and many others, do not

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<sup>10</sup> Quoted in Raymond Tallis, *Aping Mankind: Neuromania, Darwinitis and the Misrepresentation of Humanity* (Durham 2011), 52.

think so. This is because neuroscience can never give us the kind of universally quantifiable laws that neurodeterminism requires.

In his book *Laws, Mind and Free Will* (2011) Steven Horst argues that the problems with free will have to do with our ideas about neuroscientific / psychological laws. As we have already seen, when formulating the notion of determinism laws are understood 'strictly' or universally quantifiable and exceptionless. Among several others, Horst has argued that at least neuroscientific / psychological laws are not like this at all. Instead these laws resemble *ideal models* that abstract away numerous causal factors and are highly context sensitive. Thus,

one can embrace the truth of individual laws, or indeed any set of such laws, without any implication of determinism, because the idealization conditions of each law are essentially open-ended. ... Likewise, psychological laws, as idealized laws, do not claim to govern all possible behavior, but only extract a partial list of real invariants in psychodynamics. In no way are further lawful invariants or voluntary anomic spontaneity excluded.<sup>11</sup>

Psychological / neuroscientific laws are, thus, idealizations that abstract away 'from facts about other parts that may matter crucially in vivo in modulating the behaviour of the system we are studying.' In this sense, laws of psychology and neuroscience are far more complicated than physical laws that benefit from a very small number of physical forces and variables.

Horst's view of laws is based on his more general framework he calls *cognitive pluralism*. According to cognitive pluralism, our representations of the world depend on our cognitive processes. Our models and representations indeed represent the world, or at least have realistic intent, but they are not simply reflections of how things are in the world. They are idealised representations of some highly specific parts of the world for a certain purpose and are entertained by some specific cognitive systems. This dependency of our models from our cognitive systems creates a situation that Horst calls pluralistic: we have numerous models in representing the world, but no unambiguous way to reduce them into one single 'super-model' of the world that would allow us to explain everything. This plurality of non-reducible models, Horst suggests, is not an immature state of science, but a permanent feature due to our cognitive limitations.

Horst's account of scientific and psychological laws leads to the conclusions that neuroscience can no longer be seen as producing laws that

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<sup>11</sup> Steven Horst, *Laws, Mind and Free Will* (Cambridge 2011), 9.

force us to accept any kind neurodeterminism. The laws in neuroscience are not universally quantifiable, but instead highly context specific and have *ceteris paribus* clauses. ‘The motivation for determinism must, thus, be found either in misunderstanding of the laws we have received from the scientists or else in a commitment to some additional type of principle.’<sup>12</sup> These additional principles are usually metaphysical in nature – the most common being the causal closure thesis that I just mentioned.

#### 4.3. FREEDOM AS TRANSCENDENTAL

Horst’s argument can be supported by arguments coming from other sources. For Horst, the necessary plurality of our models of human minds and behaviour entails that we cannot get from neuroscientific models to neurodeterminism. One supporting line of argument could be that freedom is not the kind of phenomenon that neuroscience can say anything about anyway. Raymond Tallis and Roger Scruton, among many others, have argued that the concept of freedom is not really an empirical notion, but rather a transcendental one. Freedom is, in this view, something that is beyond neuroscience.

Both Tallis and Scruton argue that the issue of human freedom has to do with what human selves are and how *intentionality*, aboutness, works. Further, they argue that neurodeterministic interpretations of neuroscience threaten not only freedom, but all our mental concepts based on intentionality: selves, consciousness, responsibility, duty, purpose and all such notions that are irreducibly *teleological*, or purpose-driven. Teleological notions cannot be translated into the notions of science because science, in principle, rules them out. This does not mean that the phenomena they refer to are not real.

Let us think of mental states as propositional attitudes towards certain propositions. Let us further say that propositions can be understood as representing some states of the world being such and such.<sup>13</sup> When I am aware of, let us say, a hat in front of me, I have a certain propositional attitude towards it, namely, the attitude of believing that there is a hat in front of me. On the one hand, there are all sorts of causal processes connecting the hat and my awareness of it – processes that neuroscientists study. These involve light rays hitting my eyes, them being converted into electric impulses and

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<sup>12</sup> Horst, *Laws, Mind and Free Will*, 139.

<sup>13</sup> Here, we can leave aside the question whether all mental states are intentional in this sense. It is enough for the argument that there are some mental states that are. I myself tend to think that there are some mental states that do not exhibit this kind of intentionality.

processed in a certain way in my cerebral cortex. But this is not everything that is going on. According to Tallis, there is another process, intentionality, which reaches from the causal effect of the hat to the cause, the hat itself. Not only does my perception consist of the hat causing certain things in me, there is my awareness of the hat as an object with certain properties that proceeds from me towards the hat. Without this 'reaching out' of intentionality, there would be no awareness or aboutness that connects my propositional attitudes to the hat. Thus, with respect to persons and the way that they relate to themselves and their surroundings, there is always two-way traffic: causal influences from the objects of awareness to the experiencer that the sciences can track and intentional influence from the experiencer towards the object of awareness.<sup>14</sup>

According to Scruton, this intentionality makes it impossible to replace our everyday mental concepts with those of neuroscience. Our mental concepts do not provide us with causal explanations of our actions; rather they represent others and us in the light of rationality. Scruton writes:

Our way of representing the Lebenswelt is not replaceable by the theory that explains it. Our world is the world of appearances, ordered by concepts that are rooted in dialogue, and therefore in the first-person perspective. But that perspective will not feature in the data of any science.<sup>15</sup>

Our *life world* interpreted through intentional concepts is, thus, not understandable in causal, scientific terms:

People can be conceptualized in two ways, as organisms and as agents. The first way employs the concept of 'human being' (a natural kind); it divides our actions at the joints of explanation, and derives our behavior from a biological science of man. The second way employs the concept of 'person,' which is not a concept of a natural kind, but *sui generis*. Though this concept, and the associated notions of freedom, responsibility, reason for action, right, duty, justice, and so on, we gain the description under which a human being is seen, by those who respond to him or her as a person.<sup>16</sup>

Thus, for both Scruton and Tallis, the capacity for first-person awareness and intentionality allows us to see ourselves and other people from a non-scientific and non-causal point of view, from the point of view of reasons and freedom. In other words, humans are special because they act as agents in a human

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<sup>14</sup> Tallis, *Aping Mankind*, 103–111.

<sup>15</sup> Roger Scruton, 'Neurononsense and the Soul,' J. Wentzel van Huyssteen & Erik Wiebe (ed.), *In Search of Self: Interdisciplinary Perspectives on Personhood* (Grand Rapids 2012), 338–356.

<sup>16</sup> Scruton, *Neurononsense*, 345.

world created and sustained by first-person awareness and sharing of that awareness through numerous social interactions and behaviours.

Freedom, as Tallis and Scruton understand it, is the human capacity to 'own' one's actions and take actions as representing what one is. Free actions are actions that can be made sense of in terms of a person's reasons for action. Notice, that reasons for actions are irreducibly intentional:

The countless events that are subsumed in reasons cannot be generated – requisitioned, orchestrated – by ordinary causation by processes of the kind that are described in neuroscience. ... Wishes, intentions and other propositional attitudes are not simply caused, nor simply causes. ... Actions are not – and could not be – caused in the narrow, atomic, linear sense implied in the term 'cause.' To see actions aright, we have to invoke the notion of an explicit purpose, which pulls us towards goal, which we have ourselves envisaged and articulated, and shapes the succession of action-components we undertake.<sup>17</sup>

And because of the peculiar aboutness of intentionality, reasons cannot be made sense in causal terms. Thus, all attempts to see human actions in purely causal, neuroscientific terms will fail: they remove the whole context of meaningful action and the agent's reasons for acting thus losing the possibility to judge whether an action was a free action or not.

Given their analysis of freedom, one need not be particularly bright to predict what Scruton and Tallis say about Libet's experiments. Although their solution to the problems presented by Libet's research is somewhat similar to Sarot's, the difference is their insistence that intentional phenomena cannot be studied the way in which Libet set up his experiments. Scruton and Tallis argue that Libet's experimental setting is naïve and simplified because it attempts to address the issue of freedom by tracking the neural correlates of simple hand movements and removing their intentional context. This is to forget the immense network of decisions, goals and reasons that go into the whole situation in the lab itself: what is expected from the participants, what they think is going on, what they want by participating in those experiments, and so on. Flexing one's hands is not the goal of the participant's action, rather the participant's reason for flexing his hand is that he wants to do what Libet says, that is, respond accordingly to what he is asked to do. Thus, the fact that there is a physical-causal antecedent for the participant's hand flexing before

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<sup>17</sup> Tallis, *Aping Mankind*, 251.

the conscious awareness of it, is neither here nor there as to the question whether that action was free or not.<sup>18</sup>

#### 5. CONCLUDING REMARKS

In this article, I have presented some theological and philosophical reasons for Christian compatibilism. I have also argued that despite all the (pop) science fuzz, the nature of our freedom and what is required for it are outside the sciences. In this sense, I think, I am willing to go as far as saying that not only is it the case that current neuroscience does not eliminate libertarian free will, but it seems that it is not even possible for any conceivable theory of neuroscience to do this. What neuroscience can do, however, is to highlight the fact that some of our actions are driven by causal factors which we have not previously recognised and which we have no control over. Thus, neuroscience (as well as cognitive science and cognitive psychology) gives us a reason to reflect whether we are actually as free as we think we are. This might lead us to consider the theological and philosophical reasons for libertarianism and compatibilism.

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<sup>18</sup> For Tallis' view on Libet, see Tallis, *Aping Mankind*, chapter 7.

