

# REVISIONISM OF REVISIONISM IN THE DEBATE ON FREE WILL

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## ABSTRACT

In this article we critically examine Vargas's revisionistic theory about free will. Contrary to his claim that there is no empirical evidence for libertarian freedom of the will, we expose empirical results from Schultze-Kraft et al. experiment. We interpret these findings by invoking non-causal and agent-causal libertarianism. According to this, we conclude that Vargas's revisionistic theory that recommends that those who hold libertarianistic commonsense view should revise it towards compatibilism is not warranted and that those who hold libertarianistic commonsense view should retain it; moreover, those who hold compatibilistic or deterministic commonsense views on free will should revise them towards libertarianism.

## KEY WORDS

revisionistic theory, free will, libertarianism, revisionism

## CLASSIFICATION

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A “revisionist theory” in the debate on free will would be any theory that claims that we should revise our thinking about the fundamental notions in this debate. Moreover, according to Manuel Vargas [1], revisionism should give two things: a *diagnosis* about what and how we think about free will and a *prescription* how we should think about it. When these two notions, diagnosis and prescription, differ, we have a revisionist theory. There are several revisionist attempts [2, 3], but we would like to discuss one important point in Vargas’s [1, 4] theory. His diagnosis is that the commonsense view on freedom of the will is mainly incompatibilist and libertarian, i.e. freedom of the will and determinism are incompatible, and humans have freedom of the will because determinism is false; then, his prescription aims towards the compatibilist view. Vargas does this because he is persuaded [1; pp.143-145] that *there is no empirical evidence that could show that human beings have freedom in the libertarian sense*. In this article, we would like to show that this is not warranted, and so revise his revisionist theory.

Before we get to the main point, and although it is very well known, we have to say just briefly in what incompatibilism, libertarianism and compatibilism consist.

Incompatibilism holds that determinism and freedom are not compatible. Basic requirement for freedom about which incompatibilists agree is that an agent could have done otherwise in completely the same situation in which an agent has done something. So, for incompatibilists, either we have freedom, which means that requirement is fulfilled, or if requirement is not fulfilled, determinism is the case and we don not have freedom. It could not be both that we have freedom and that determinism is the case: it could not be both that determinism holds and that we still have freedom. Incompatibilists can be either hard determinists or libertarians. Those who hold that determinism is true are hard determinists, and according to them, we have no freedom of will and no freedom of action. If determinism is the case, then our will and actions spring from initial states of the universe (or at least from distant past when there were no agents), and laws of nature. Since neither of these are under the control and influence of human beings, we have no any kind of freedom. The stronger variant of incompatibilism is hard incompatibilism which hold that both determinism and indeterminism are incompatible with freedom. This means that if anything is done indeterministically and that absolutely nothing determines what has been done, this is not freedom of the will and neither it is a freedom of action.

Those who are incompatibilists and claim that we have freedom of the will and action are libertarians. They think that at least in some situations, there is a possibility for an agent to do or not to do something, namely that if an agent did something, it was equally possible for him to do something else instead in this same set of circumstances. Libertarianism comes in three main ways: non-causal, agent-causal and event-causal form. For our purposes non-causal and agent-causal libertarianisms are important, so it is in order to say a few words about them.

Non-causal libertarianism is a form of libertarianism that enables freedom by dispensing with causation in relation to decisions and choices (and, derivatively, actions) altogether. Goetz [5; pp.8-9] in expounding a non-causal theory says: “... the power to choose is ontologically a fundamental and irreducible mental property of an agent, where exercising of that power by the agent is primitive or simple event in the sense that it has no parts (it lacks internal causal structure) and is intrinsically active and, thereby, essentially uncaused.” The decisions and choices (and, derivatively, actions) that an agent commits are uncaused events for which he had reasons, though the reasons are not their causes. An agent possesses adequate control over reasons, having fundamental non-analyzable direct power over simply making a choice or decision: since decisions and choices are such, an agent’s agency is free from any constraint that causation in any form may impose upon him in deciding and choosing (and, derivatively, in acting).

Agent-causal libertarianism is a form of libertarianism that designates the *agent* himself as the non-deterministic cause of his decisions and actions, and not some mental event that occurs

within him, the rationale being that to justifiably say that actions of an agent are truly his, it must be the case that the agent in his *entirety* causally contributes to his decisions and actions. And to justifiably say that *and* that the agent committed his action nondetermined, this variant of libertarianism posits the existence of a distinct kind of causation. Next to event causation, causation of an event by an event, which is the kind of causation that seemingly prevails in the natural world, there is agent causation, which is the kind of causation that operates in the realm of human decisions and actions. This causation is distinct because the agent is not an event, but a *substance*. And since the substance is not an event, the agent is not just a link in a causal chain, so it can not be an effect. O'Connor [6; p.71] in explicating agent-causal theory says that "...the agent, having the relevant internal properties will *have it directly within his power to* cause any of a range of states of intention delimited by internal and external circumstances". So, in a way, agent is an uncaused cause. Agent causation gives agents freedom for two reasons: agents cause their decisions and acts non-deterministically and are themselves uncaused, and because they cause their decisions and acts as individual substances, they are *sole and genuine sources* of their decisions, choices and actions.

Compatibilists, on the other hand, say that it is possible that determinism holds and agents have freedom of the will and freedom of the action. They have developed several different approaches and arguments to demonstrate this. Some compatibilists argue for the compatibility of determinism and freedom by reducing the freedom of the will to freedom of action. We act freely, according to these compatibilists, if we do what we want or desire to do when there are no any obstacles to do what we want and desire, and we can act freely under determinism since determinism does not entail that we cannot act according to what we want or desire. It is when we confuse freedom for something else, for example, for a will that can act contra causally or non-causally that we (according to them, wrongly) think that determinism undermines freedom. This deflation of personal freedom to unencumbered intentional actions, they say, in no way takes anything away from human dignity, happiness, and aspirations since it is this what ordinary people mean by the notion of freedom. They want to do what they want or desire to do and this is possible under determinism. Moreover, compatibilists would argue, that freedom presupposes determinism, for it bestows the causal link between us and our actions. Without that link between us and our actions, it would be hard, compatibilists think, for us to say that our actions are truly are own and that we can be held morally responsible for them.

Other compatibilists argue for the conditional analysis of freedom of the will: the ability to do otherwise than one actually does *is* compatible with determinism.

In the conditional sense, an agent would have done otherwise than he actually did *if he wanted or willed to do otherwise*. This would be possible under determinism as determinism is a thesis of a conditional physical necessity: there is a unique future given the laws of nature and the past. Had the past been different, then there would be a different unique future; or, had the laws of nature been different, then there would be a different unique future, again.

When this is applied on us, given the laws of nature and a different past, we would have wanted or desired otherwise than we do and would done otherwise than we do; given the same past and different laws of nature, we would have wanted or desired otherwise than we do and would have done otherwise than we do, again.

If this conditional sense is meant when we say that someone can do otherwise than he does, then we can do otherwise even if determinism is true.

Still other compatibilists, aware of the appearance of quantum mechanics in physics that made the concept of indeterministic causation legitimate, do not push for the necessity of determinism for freedom, nor do they, as the conditional analysis argument turned out to be too problematic, push for the compatibility of determinism and the ability to do otherwise.

Instead, they analyze free will as an action originating in an appropriate way: action has to spring out of an adequate *source*, and an agent has to identify himself with that source. If an agent can be identified with this source (for example, with the content of his mind, or particular desires, or certain mental history) then if his action is a result that came from this source in a non-deviant way, we may say that this action is freely done even though that source itself may be fully determined (say, by laws of nature and the past: all desires, beliefs, courses of thinking and so choosing and deciding may be fully determined, according to all who embrace determinism, so compatibilists too, by the past states and laws of nature, even before an agent has come into existence).

We think that compatibilism is an untenable position. All versions of compatibilism endorse determinism, and all compatibilistic determinisms entail that something other which is not in the control of an agent, should be different first, in order that an agent could have done otherwise. (Whether it be laws of nature, outer obstacles, the past, counterfactual situation or whatever else). It seems that this only means that “agents” are still fully determined (and in a new situation in which, seeing from that situation, they still can not do otherwise), only differently, not that in the same situation they can do otherwise. So, in fact, neither compatibilism can embrace freedom. Compatibilism is violence over freedom. But we shall not pursue detailed arguments against various kinds of compatibilism here because our aim here is to look for some empirical results that point against revisionism in Vargas’s sense.

As we already said, Vargas says [1; pp.143-145] that there is no empirical evidence that we possess libertarian freedom. In response, we shall offer results from research done by Schultze-Kraft et al. [7] suggesting that we do possess libertarian freedom. We shall not go into discussion about the methodology or processes how the experiment has been done, nor shall we discuss its technical points. We assume that the experiment has been done according to highest methodological and technical standards and demands. What is essential for our discussion consists in the following:

Schultze-Kraft et al. [7] conducted the experiment to see whether human beings have freedom of will and freedom of action. This experiment consisted in monitoring brain electrical activity and recording its neurological electroencephalograms.

The experiment had three stages. Let us have a longer citation from Schultze-Kraft et. al. [7; p.1080]: “Subjects were confronted with a floor mounted button and a light presented on a computer screen. Once the light turned green (‘go signal’), subjects waited for a short, self-paced period of about 2 seconds after which they were allowed to press the button with their right foot at any time. They could earn points if they pressed while the light was green, but lose points if they pressed after the light had turned red (‘stop signal’). The experiment has three consecutive stages (...) In stage I, stop signals were elicited at random onset times (sampled from a uniform distribution); thus, the movements were not being predicted. The EEG data from stage I were then used to train a classifier to predict upcoming movements in the next two stages of the experiment. In stage II, movement predictions were made in real time by brain-computer interface with the aim of turning the stop signal on in time to interrupt the subject’s movement. The term ‘prediction’ (is) used here to denote any above-chance level of predictive accuracy, not only perfect prediction. After stage II, subjects were informed that they were being predicted by the computer and that they should try and move unpredictably, and another otherwise-identical stage followed.”

For the complete results of the experiment, one should look at the Schultze-Kraft et al. [7; pp.1084-1085] article. The relevant part of the result for our purposes here was that the subjects indeed succeed not to press the button even when the unconscious onset of the brain activity has already begun (for pressing the button) and when the brain-computer interface predicted, based on that unconscious brain activity, that the subject will press the button.

Experimenters [7; p.1081] called such an outcome (among other possible outcomes) “aborted button press”: “In stage I, aborted button presses occur very rarely, (2,2 %), a rate that substantially increased in stages II and III (15,2 % and 16,3 %) ...”.

So, what does it mean?

Schultze-Kraft et al. [7] recorded that there is already brain activity before the subject became conscious of it, and it is a process that leads to an action. For the subject, it seems that he consciously decided to do what he did. But, the beginning of the (unconscious) brain activity could be about one second long [7; p.1083]), and, according also to another research of Soon et al. [8], even up to four seconds long, before it became conscious for the subject.

So, for the periods of one (and, possibly, to four) second(s), so-called readiness potentials in motor cortex, which led to the simple movements, were recorded [7].

It could seem then that there is only an illusion for the subject that he has chosen consciously what he did do; it seems that unconscious, purely physiological (chemical-physical), activity of the brain determined will and action which issued in the end and that consciousness and the subject itself in fact does not contribute, so that there is no free will and free action. Namely, if the conscious content of the will and action that follows from it, are the products of non-conscious brain processes, which in turn are governed by laws of nature, on which subjects can have no control, then it seems that something else fully determine will and action – initial states and laws of nature rather than subjects themselves. Subjects would be rather passive “observers” what happens to them along with getting the illusion as if they consciously decided, willed and did certain action. But, researchers [7; p.1080] then posed the following question: “... whether person can still exert a veto by inhibiting the movement after the onset of the readiness potential”?. The answer they have found in their experiments is that “there is a possibility for subjects to stop their intended action until 200 ms before the beginning of the physical execution of action” [9; p.9]. Schultze-Kraft et al. [7; p.1084] claim that their experiments “suggest that humans can still cancel or veto a movement even after onset of the readiness potential. This is possible until the point of no return around the 200 ms before movement onset. However, even after the onset of the movement, it is possible to alter and cancel the movement as it unfolds.”

Experiments of Schultze-Kraft et al. point towards the conclusion that agents can exert voluntary conscious influence to stop the action for which unconscious neurophysiological brain process has already started. We are not just illusioned passive observers of what happens, but we can voluntarily intervene to do otherwise than it would be done if that unconscious neurophysiological brain process goes through. “We can voluntarily change the course of our own actions.” [9; p.9].

Experimental subject simply could have done otherwise (until 200 ms before the execution of the action). Namely, if the subject simply decided in a split second, not to execute the action, for which the onset of the brain activity (brain process) already occurred, he could stop and could have not execute that action so that brain process which begun and last for some period unconsciously, is not carried out to its completion in executing the action. So, both possibilities are within the power of the subject, to execute and not to execute an action under the same previous conditions.

These experimental results can be interpreted in an incompatibilist libertarian way. We think that the outcome of the experiment is best captured by non-causal libertarianism; agent-causal also has merits, though we think that event-causal libertarianism is the most problematic kind of libertarianism by itself so we shall not explore the possibility of interpreting results of Schultze-Kraft et al. experiment in terms of event-causal libertarianism.

So, there are two possible libertarian options that can fairly accommodate these findings. First is non-causal for which we think is the best.

The Experiment by Schultze-Kraft et al. and its results suggest that at that level – elementary level but from which any other higher level depends – we plausibly have non-causal libertarian freedom. Experimental subject – as an agent – sometimes simply does not carry the action for which the first stages of (brain) process are already in progress. He has simply not done it through, contrary to the neurophysiological onset in the brain. Experimental subject – an agent – simply exercised decision (and accordingly, action) not to press the button with the right leg (though unconscious onset of the brain process for pressing the button is already present). An agent, in this situation, used his fundamental mental power and directly exercised it (refraining of the pressing the button). It is not mediated via any causal link. It is simply and directly exercised. We can invoke here only an intentional explanation. Namely, the experimental subject was told before the experiment that, at will, sometimes do not move the finger. So, he has internalized that instruction and has an intention with the intentional content “sometimes do not move the finger” and this intentional content is directly, immediately and non-causally efficaciously exercised in stopping the action for which unconscious neurophysiological process has already begun.

It seems that in the case when unconscious brain process is carried through and the button is pressed in the end, there is no need to invoke a fundamental mental (non-causal) power for exercising the decision (and, subsequently, an action) to explain the pressing of the button, but it is not so. Invoking only neurophysiological (physico-chemical) processes is not enough, even in this case, because, as experiment shows, subjects can exercise *not-pressing* the button as well and under the same circumstances (until 200 ms before the action), for which we have to invoke an explanation beside neurophysiological (physico-chemical) processes; so we have to say that, even when button is pressed, that an agent exercised his fundamental mental (non-causal) power as a decision to *press* the button, this decision letting the neurophysiological (physico-chemical) process to go through. There is no redundancy between invoking fundamental mental (non-causal) power for exercising the decision (and, subsequently, an action) and neurophysiological (physico-chemical) explanation of the decision and action of pressing the button.

Now we shall consider the agent-causal option. Seen through the lens of agent-causation, Shulze-Kraft et al.’s findings suggest that the research subject can be constructed as the agent and as a substance – because he can nondeterministically exert his (agential) power to decide over which action he will do. If the unconscious brain process leads to an action he wants to do, an agent exerts his agential power as non-interference on the already going-on process and allows the unconscious brain process to finish its course, becoming conscious and terminating in action. If the unconscious brain process leads to an action that an agent does not want to do, an agent as a substance exerts his (agential) power and intervenes by substantially causing the terminating the brain process and not doing an action that would issue from that (which was in the onset unconscious) brain process. An agent can do both of these actions as a substance, and causally speaking here, whether omitting an action or allowing the action, both are within his power; so, an agent is causing these outcomes entirely on his own and only an agent is the cause of them. Since it seems from the experiment that both actions are available (both to press and not to press the button) to the experimental subject, under the same antecedent conditions, it seems also that neither is (fully) caused by prior events or other things, so experimental subject as a *substance* (on his own, at that moment) causes one of these events to happen (pressing or not pressing the button).

These interpretations allow us to say the following: if the prevailing commonsense view on freedom of the will is incompatibilist and libertarian, we should not revise it; we do not need revisionism in this direction. Revisionism that should be undertaken should go into opposite direction: those who have pre-theoretic compatibilist or deterministic intuitions or commonsense, should revise them to an incompatibilist libertarian view.

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