

# Why Free Will is Real – Book Review



If you are interested in this book, you may like to listen to [a podcast](#) of Professor Christian List's LSE lecture, 'Free Will in a Deterministic World?', recorded on 4 December 2012.

**Why Free Will Is Real.** Christian List. Harvard University Press. 2019.

The universe may very well be deterministic. According to [many physicists](#), there are natural laws that govern the universe. On most specifications, these laws are deterministic, meaning that they pair with the initial conditions set at the Big Bang to determine every future state of the universe. If determinism is true, all physical facts of the universe are decided and unchanging.

Determinism poses a substantial [problem](#) for free will. Say I am choosing between moving my coffee cup or leaving it be. If determinism is true, the physical states of my body, my brain and the coffee cup are all already decided. How then can I choose to move the cup? It seems instead that the choice has been made for me. My brain and body will move following the natural laws' current. I will move the cup if the laws of the universe require me to do so. While the movement feels voluntary, instead it may simply be a function of deterministic physics, rather than personal choice or free will. This is a frightening possibility. We may feel that our lives are up to us, that we can choose our profession or outfit or partner. However, this challenge from determinism presents the possibility that none of these seeming choices is ours to make. Instead, they were decided at the Big Bang, before we ever existed. Determinism presents a fundamental challenge to the existence of free will.



CHRISTIAN LIST

In [Why Free Will Is Real](#), Christian List argues that free will *is* real despite the possibility of deterministic physics. In fact, determinism is merely one of three challenges that List confronts against free will. Radical materialism, determinism and epiphenomenalism are the three primary objections in the philosophical literature to the existence of free will. List replies to these three challenges using flavours of one central insight: free will is a high-level phenomenon not found in fundamental physics. While List recognises that this insight has been [proposed by others](#), his treatment is the first presentation that responds to all three primary challenges.

According to the first objection, the challenge from radical materialism, the human organism is merely a machine. While talk of intentional thoughts is useful in everyday life, in science it is a remnant of folk psychology and will be replaced by neuroscientific theories of human behaviour. But free will requires a person to be able to have an intentional thought. Therefore, because the human mind is radically materialistic, there is no free will — or so the challenge posits.

List responds that intentionality — the ability to have mental representations of the world, like beliefs, goals and intentions — is a high-level psychological phenomenon rather than a phenomenon to be found in the brain. This is not a dualist assertion where the mind exists independently of the brain. Instead, mental properties like intentions are realised by the brain, but are not identical to brain properties.

Furthermore, ascriptions of intentionality have been indispensable to our understanding of other humans. The flourishing of psychology, sociology and economics exhibits this. List argues that the theories found in these disciplines are not merely shorthand for theories about brain states. Instead, they provide independently valuable explanations about human behaviour that would be erased if we adopted a radical materialism. Consequently, List argues that free will withstands the challenge from radical materialism.

Next up is the challenge from determinism, with which we are already familiar. The keystone aspect of the challenge is that determinism seems to imply that there are no alternative possibilities. Therefore, a person is incapable of making a choice. List replies by arguing that determinism in the fundamental physics does not necessitate ‘agent-level’ determinism, which is the level of a person’s choice. This stems from the central argument that free will is a high-level property. In this case, mental states like choices can be realised by multiple brain states. For example, all of our brains are slightly different, and yet we can each still form the intention to move a coffee cup. In this way, mental states are multiply realisable. List argues that this means there are multiple alternative possible intentions I could form, even if my brain state is predetermined by deterministic physics. Therefore, there can still be indeterminism at the agent level, even if there is determinism at the physical level.

Finally, the challenge from epiphenomenalism originates from a [classic metaphysical problem](#). Philosophers and scientists alike claim that all physical events have sufficient physical causes. Furthermore, they often agree that a physical event does not have more than one simultaneous, sufficient physical cause. Finally, as mentioned earlier, the mind is realised by the brain. These three principles challenge the possibility of a person’s mental state, like an intention, having any causal impact on the world. When I move my coffee cup, the physical state of my brain initiates a causal chain that leads to the cup moving. My physical state, and the state of my surrounding environment, is a sufficient cause of the cup moving. Therefore, there does not seem to be room for my mental state to have any causal role. My brain state was already the cause, and the event cannot have two simultaneous causes. This encapsulates epiphenomenalism. Because free will seems to require that our mental states have causal control in the world, epiphenomenalism challenges its existence.

List replies to this final objection by appealing one final time to his central claim: free will is a high-level phenomenon, not one to be found in the fundamental physics. List relates mental causation to the case of a glass flask breaking when the water inside it boils. In both events, there seem to be two places to identify causation: the microphysical state (the brain state and the state of the water molecules) or the higher-level state (the mental state and the boiling of the water). Either the specific arrangement of the molecules caused the glass to break or the overall boiling did. Similarly, either the specific microphysical state of my brain caused me to move the cup or else my mental intention did. List argues that, in the water case, it would be wrong to identify causation in the lower level, because different arrangements of water molecules would have still led to the glass breaking. Boiling is multiply realisable, because different microphysical states of the molecules can still constitute boiling. Therefore, perturbing the microphysical state of the water would not necessarily have prevented the breaking. However, the glass would not have broken had the water not boiled. Consequently, causation should be found, according to List, in the higher-level state of boiling, rather than the lower-level microphysical state. He claims the mental case is analogous, because mental states are multiply realisable in the brain.

List's three replies are clear, concise and accessible to a non-specialist. Even more importantly, they blend into one cohesive positive argument for the existence of free will. Philosophers are sometimes known to find a single method or insight and spread it across their work as if it is new each time. This faulty method is the opposite of List's approach. List surveys the three primary challenges to the existence of free will and genealogises them to one fundamental misunderstanding. He then proposes an alternative positive theory, according to which free will is not to be found in physics because it is a higher-level phenomenon, just like biology is of a higher level than chemistry.

His argument is largely convincing, even for specialists. However, it does not engage with all the nitty gritty philosophical details, probably because it is written for a broad audience. The three suggested places his argument could be improved are narrow objections within these details. First, List assumes certain metaphysical properties of natural laws that are objected to [elsewhere in the philosophical literature](#). This would not be a problem if List presented, or at least pointed to, a reply to these objections. List assumes that natural laws somehow 'govern' the physical universe, but he does not specify what 'govern' could mean. The laws themselves are not physical objects that can causally interact with other physical objects. So how can they play a causal role in the universe? This is a classic philosophical puzzle about the nature of laws, and List does not need to provide a thorough reply. That being said, the puzzle deserves at least a reference to help skeptical specialists enter into his argument in the first place. This could be remedied simply with a few paragraphs in the introduction.

Second, and slightly more substantial, List's argument often appeals to the explanatory value of free will within the social sciences. As outlined in the above discussion of the radical materialism objection, List argues that the indispensability of intentionality talk for explaining human behaviour in economics and sociology justifies his claim that intentionality is real. This is a metaphysically tricky claim because it equates the realness of an entity with its explanatory usefulness. Why think that the pragmatic value of explaining behaviour in terms of an entity provides evidence for the claim that that entity actually exists out there in the world? To use a value-laden example, many would likely argue that gender does not exist out there in the world as a metaphysical entity, even though it is sometimes valuable to do economics and sociology in reference to it. Why think that explanation has bearing on the metaphysics? List does reply to this objection, referencing many cases in physics where we assume the existence of some entity because its existence has been demonstrated experimentally, even if we are unable to observe the entity itself. The reply that physics often assumes metaphysical existence from explanatory usefulness is a strong one, particularly when discussing the social sciences.

This brings to light one final consideration about List's presentation. List's argument rests solely on the third-person perspective, where free will is ascribed to others. This is valuable because it is the primary perspective used in the social sciences. That being said, free will seems intertwined with the first person as well. Our ability to think through choices on our own and then implement those choices is importantly personal. Appealing to explanatory usefulness is valuable when the free-will discussion is put alongside the social sciences, which seek to explain human behaviour. However, the explanatory usefulness of free will seems less valuable when thinking about the first-person, personal perspective of decision-making. List decidedly does not engage with this perspective, but it would be worthwhile for him to justify this choice more thoroughly.

In all, List's argument is accessible, clear and convincing. He argues for the existence of free will in the face of three seemingly insurmountable objections by appealing to one primary and powerful insight. While a few features of his argument could be expanded upon, the intended audience and brevity of the piece take deserved precedence. List's carefully crafted argument may help many of us sleep more soundly, being further assured that we can choose how to live our own lives. Free will may very well be real.



#### Notes:

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