

Does Scientific Realism Think For Us?

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ABSTRACT

My paper presents scientific realism in relation to the conception of free will, and the ways in which scientific realism shapes the discourse of our conscious deliberations. Specifically focusing on how such conscious deliberations arise, my paper investigates neuroscientist Michael Gazzaniga's account of cognitive functioning alongside Descartes's account of a thinking being, as well as Charles Darwin, Richard Lewontin, Karl Popper, and Thomas Khun's influence on how the external states of the world impact our mental processes. Consequently, it stands, that in order to productively navigate the contemporary physical world, scientists must step beyond the inquiries they have been responding to for several generations. I argue that we have subjugated our freedom to the omnibenevolence of scientific research, and have not taken into consideration that scientific research rests on a bed of evidence that will, in turn, be refuted in the future. Therefore, when we contemplate freedom, it does not mean that we are free from the causal functioning of the universe as neuroscientists suggest; rather we are free from allowing others to think for us beyond the causal stipulations of the universe.

KEYWORDS

Scientific Realism, Freedom, Will, Underdetermination, Philosophy of Science, Cognitive Functioning, Darwin, Lewontin, Popper, Khun, Lewens

In *The Meaning of Science*, Tim Lewens raises the question “has scientific research really imperiled the notion that our conscious deliberations often make a difference to what we end up doing?” (Lewens 2016, 187). We may undoubtedly regard ‘conscious deliberation’ as the source of action, so we are then lead to wonder: how do conscious deliberations arise? And most importantly, what are the factors that play into our conscious thoughts?

As Lewens posits ‘conscious deliberations’ against the notion of free will, he extracts neuroscientist Michael Gazzaniga’s account of cognitive functioning. Gazzaniga proposes that thinking beings are not free from causal-mechanical orders that characterize nature. However this is not an astounding claim, considering the neuroscientific evidence he falls back on is rooted in the assumption that the condition of our brain is causally influenced by prior internal and external conditions of the world, (Lewens 2016, 188).

Lewens asserts that in order for neuroscientists like Gazzaniga to affirm thinking beings have free will, they must go through a “heroic denial” of discarding human beings as a part of nature. For neuroscientists the notions of free will are rooted in the idea that human beings are exempt from the chains of influences that characterize the behavior of material objects. This notion of free will does not place emphasis on thinking beings’ ability to consciously deliberate, rather it emphasizes that a thinking being is free only in so far as they are not influenced by the external functioning of the world (Lewens 2016, 189).

Therefore, from a neuroscientific perspective, our conscious deliberations are causally impacted by the internal and external states of the world. If we consider this to be the case, then scientific research has not endangered whether or not our conscious deliberations impact our free will—rather scientific research asks a different question entirely. Scientific research points us in the direction: what happens in the peripheries?

If we consider Descartes’ account of a thinking being, or simply consider his *cogito ergo sum*, we uncover that he proposes an egocentric interpretation of how the mind relates to the world. This is most notably represented in his analysis of conduction when a candle approaches fire. As heat transforms the wax’s color, fragrance, and form, Descartes is aware that it nonetheless remains the same piece of wax. In order to confirm that the heated, altered form of wax nonetheless remains the same object Descartes relies on the mental process of imagination as well as the intellect. The intellect confirms that Descartes’s perceptions are

clear and distinct, whereas the imagination allows him to project the wax's transformative sensible qualities overtime (Cottingham 2013, 21).

According to Descartes, the intellect, imagination, and the senses are what factor into conscious thought, therefore constituting conscious deliberation as a predominantly mental process. From here we come to recognize that Descartes exercises a form of judgment, engages the faculty of the intellect so as to concede that the wax remains the same object despite its transformation. However Descartes presupposes that the faculty of judgment stems from God, just as the freedom of will. Given that judgment yields towards the power to perceive, the intellect is limited to the finite qualities of perception. Whereas the will is infinite, operating in accordance with the intellect yet remains distinct from the elements of conscious deliberation, and relies on the intellect to present perceptions that are clear and distinct (Cottingham 2013, 22).

Thus it follows, if the will is an extension from God that operates as a faculty of judgment, it appears a though Descartes presents us with a notion of freedom of will.

Yet this notion of freedom interferes with God's will and other abstract mental processes, therefore inadvertently placing ethical limits to the freedom of conscious deliberation. Descartes reveals that perhaps it is important to diverge from the self as the center of conscious deliberation: how do external factors—thinking beings that are not ourselves as well as the state of the world shape our cognitive functioning?

What is of interest here is that both Gazzaniga and Descartes discount the notion of free will as the freedom to deliberate consciously. Descartes focuses on the imagination as well as the intellect as integral elements of conscious deliberations, whereas Gazzaniga discards the freedom of mental processes all together. However both Gazzaniga and Descartes similarly place freedom outside of mental processes, for Descartes credits God for our ability to will and Gazzaniga credits our hypothetical freedom from the causal pushes and pulls of the external world. Interestingly so, both Descartes and Gazzaniga characterize freedom as the freedom *from* something—rather than the freedom *to* do something. The will is only free if it is free *from* God or if it is free *from* the casual stipulations in which the world functions. My question then stands, what is it that we are attempting to free freedom from, or where have we surrendered our freedom to will?

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Lewens proposes how external factors shape our conceptual frameworks—beginning with Darwin. The Victorian bourgeois environment in which Darwin was raised shaped his theory of evolution, for he inherited his father's loans, investments, and entrepreneurial tendencies, which in turn framed his understanding of the external world. This is recognized in Darwin's idea of competition and struggle amongst biological species, and how he conceptualizes a "hidden hand" that favors the prosperity of a more diversified species over another (Lewens 2016, 129).

We come to recognize that Darwin's understanding of the natural world is influenced by the increasing industrialization of the time period, and the prosperity his family gained from this. The domination of these external factors, in respect to his cognitive processes, promotes us to spectacle the extent to which these external factors impaired his decision-making—is there such thing as choice in a capitalist society functioning behind a hidden hand?

Interestingly so, Lewens infers that although Darwin's "market-based rationale" led him to concede natural selection as the main agent for nature's diversity, it is more important to consider whether his bourgeois ideology distorted the framework in which we view the natural world. Lewens notes Karl Marx's interest in Darwin's economic terminology, and how Marxism in turn influenced Harvard biologist Richard Lewontin to undermine Darwinian "niche construction" (Lewens 2016, 130).

Lewontin recognizes the foolishness of viewing natural organisms as victims to active environmental forces, especially considering: beavers build dams so as to protect themselves from predators thus gaining leverage for better access to food, and earthworms ooze mucous that coat the walls of their tunnels which guarantees a semi-aquatic environment that suits their physiology. Lewontin, a professed Marxist, explicitly expressed his understanding of evolution through Marxist terminology so as to conceive the understanding of a natural organisms' interaction within its environment (Lewens 2016, 130-131).

It appears as though the conceptual frameworks scientists are operating within are influenced by other natural systems or other external evaluations of the world. Therefore, it is not necessarily that scientific research has imperiled conscious deliberation, rather scientists' conscious deliberations may be imperiled by external states of the world; which still leaves us to question free will, and the

extent to which these external states of the world factor into the type of research scientists conduct.

Fortunately, Thomas Kuhn and Karl Popper approach scientific enquiry with heavy speculation. Kuhn advocates if a scientific theory is admirable, then it is necessarily open for speculation (Lewens 2016, 66), whereas Popper proposes a “conjecture and refutation” (Lewens 2016, 14-25) approach to research by gathering data about the world in turn to refute it. Both Kuhn and Popper associate scientific research with the notion that it remains falsifiable and thus vulnerable for refutation. Consequently it stands, in order to productively navigate the contemporary physical world, scientists must step beyond the enquiries they have been responding to for several generations.

Thus we are left with the contemplation of freedom: how our environment potentially dictates our conceptual frameworks, and how this influences our faith in scientific research. Science is now the new appeal to authority, where individuals demonstrate their credibility by appealing to the eminence of scientific buzz words/jargon—rather than appealing towards a claim’s reason on its own grounds. This promotes a sense of “ticket-thinking” in our society, where we polarize our conception of the world based on “for” or “against” claims.

We essentially allow science to think for us and shape our discourse as we would rather have scientists prescribe our understanding of our behavior rather than investigate ourselves. Scientific jargon replaces the task of thinking, which then undermines our ability to conceive clear and distinct ideas. The emphasis our society places on scientific realism to determine our understanding of the universe demonstrates that we would much rather not have our freedom. We would rather have scientific realism think for us.

We have subjugated our freedom to the omnibenevolence of scientific research, and have not taken into consideration that scientific research rests on a bed of evidence that will in turn be refuted in the future. We in fact have allowed from scientific research to endanger our ability to freely consciously deliberate, but this does not have to be the case. When we consider the question: what are we freeing freedom from? We are essentially freeing ourselves from entrusting external concepts or conditions of the world to think for us.

This does not mean that we are free from the causal functioning of the universe; rather we are free from allowing others to think for us beyond the causal stipulations of the universe. However it appears as though science does not accept

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this definition of freedom, and it appears as though we would much rather subject our freedom to science, religion, or forms of government. It does not have to be the case that scientific research endangers our ability to consciously deliberate and ultimately influence our free will. In so far as we obtain the ability to deliberate consciously, and most importantly, act in accordance with our thoughts—we are free.

REFERENCES

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