

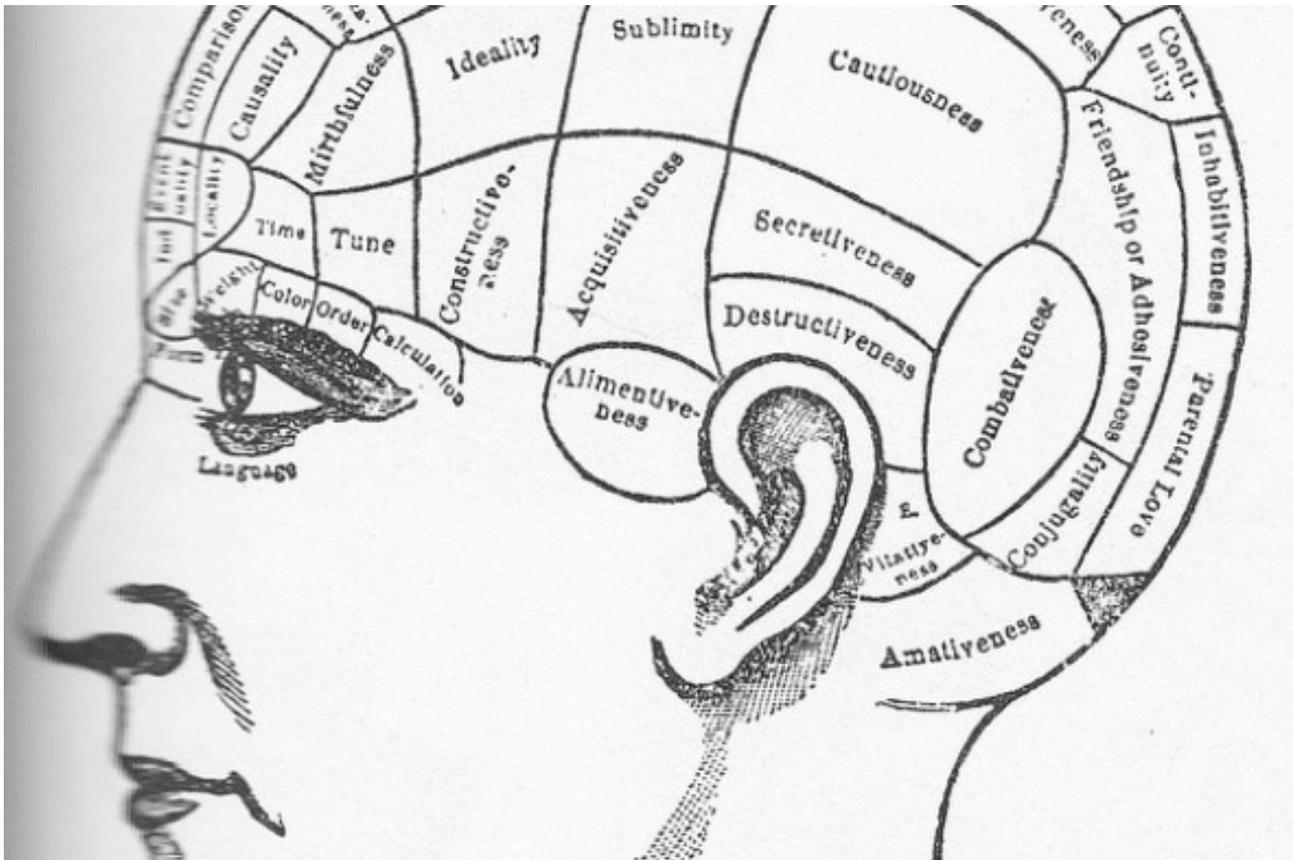


*MIND Guest Blog*

# Philosophy versus Neuroscience on the Question of Free Will

A philosopher offers counterarguments to a recent post on this age-old topic

By Hanoch Ben-Yami on June 2, 2016



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Adam Bear opens his article, What Neuroscience Says about Free Will by mentioning a few cases such as pressing snooze on the alarm clock or picking a shirt out of the closet. He continues with an assertion about these cases, and with a question:

*In each case, we conceive of ourselves as free agents, consciously guiding our bodies in purposeful ways. But what does science have to say about the true source of this experience?*

This is a bad start. To be aware of ourselves as free agents is not to have *an experience*. There's no special tickle which tells you you're free, no "freedom itch." Rather, to be aware of the fact that you acted freely is, among other things, to know that *had* you preferred to do something else in those circumstances, you *would have* done it. And in many circumstances we clearly know that this is the case, so in many circumstances we are aware that we act freely. No experience is involved, and so far there's no question in Bear's article for science to answer.

Continuing with his alleged experience, Bear writes:

*...the psychologists Dan Wegner and Thalia Wheatley made a revolutionary proposal: The experience of intentionally willing an action, they suggested, is often nothing more than a post hoc causal inference that our thoughts caused some behavior.*

More than a revolutionary proposal, this is an additional confusion. What might "intentionally willing an action" mean? Is it to be contrasted with non-intentionally willing an action? But what could this stand for? What *can* be said of us is that we do some things intentionally, in contrast with some other things

which we do unintentionally. For instance, I stepped on the nail unintentionally: I didn't even see it's there; or I left the door open unintentionally: I didn't think about it at all. To do something intentionally is to do it for some purpose. As can be seen, Wegner and Wheatley's talk of an *experience* is again out of place here: no special experience is involved in doing something for a purpose. Moreover, no post hoc or other inference is required either: we can often say for what end we did what we did, and that's enough in order to know that we did it intentionally. Instead of mentioning these trivialities, Wegner and Wheatley obscure things by mentioning the partly meaningless and partly irrelevant "experience of intentionally willing an action," and additional things later on. And again, so far, nothing for science to explain.

After these opening confused theoretical reflections, Bear turns to survey some empirical work he has done with Paul Bloom. This empirical work, he claims, has probable radical implications for the assessment of our voluntary or intentional action. So even if some conceptual confusion is indeed involved in Bear's theorising, doesn't their empirical work nevertheless support his hypothesis about the working of an unconscious mind, say? It doesn't, as I shall now explain.

Bear and Bloom presented participants with five white circles at random locations on a computer monitor and asked them to quickly choose a circle before one of the five lit up red. Choosing a circle in these circumstances amounts, I suppose, to something like focusing on one of them. Probably our gaze wanders around the circles and then, for whatever reason, we stop on one of them.

Now Bear and Bloom report that when a circle turned red especially quickly, participants reported in more than 30

percent of the cases that they had chosen the circle that lit up red. However, the determination of the circle to be lit up red was random, so the participants should have reported about 20% of coincidence.

What I would at best infer from these results is that something like the following occurred: when a subject's gaze wavered between two circles, say, and one turned red, this helped fixate the subject's attention on that circle. Moreover, because the time intervals in these specific experiments were very short, the subjects often couldn't detect the temporal order of the events, namely, that the circle turned red before the final fixation of their gaze.

Although Bear mentions the possibility that we merely mess up things because of the very short time-scales in the experiment, he prefers to draw more momentous conclusions from this modest result. "These findings suggest," he writes, "that we may be systematically misled about how we make choices." I fail to see how they could suggest anything of the sort. What is the relation between focusing on one circle out of five *for no particular reason*, and, for instance, comparing prices of different products in a store to decide which one to buy? Yet Bear presses even further with "a more speculative possibility...our minds are designed to distort our perception of choice," and the aim of this hypothetical designed distortion is, he speculates on, "to develop a belief in free will and, in turn, motivating punishment."

I find this preposterous. The misjudgment of the temporal order of some short time-scale events surely provides no foundation for these speculations about motives for punishment. The trivial observation, of which we are all aware, that in many cases, if you

punish someone for something wrong he has done then he and others are less likely to do it again, seems much more to the point.

As I see it, Bear and Bloom's research joins a series of cognitive science works which combine conceptual confusion with unfounded over-generalisations based on modest empirical results. Although we have learned a lot from cognitive psychology and neuroscience, this is not the case with the literature on free will coming from these sciences. *Pace* Bear, this "growing body of work" does not suggest "that even our most seemingly ironclad beliefs about our own agency and conscious experience can be dead wrong." Rather, it demonstrates that conceptual confusions and irresponsible overgeneralisations can mislead overconfident scientists.

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