Justin Garson. *The Biological Mind: A Philosophical Introduction*. Routledge 2015. 198 pp. \$160.00 USD (Hardcover ISBN 9780415810272); 44.95 USD (Paperback ISBN 978-0415810289).

There are a number of books that aim to introduce philosophy of biology to lower level students, and many that aim to cover the same ground with regard to philosophy of mind. This book presents a unique combination of the two. The brain, as Garson points out, is a biological organ, and therefore its functioning falls within the purview of philosophy of biology. In eight chapters, Garson introduces the basics of evolutionary theory and applies it to a range of topics, some the traditional terrain of philosophers of biology (altruism, in particular) others that have usually been left to philosophers with other specialities (consciousness, free will, psychiatric disorder, and so on). The book is less a survey of the topics covered and more an attempt to introduce them through arguments. Garson sometimes offers interesting novel arguments for his views, ensuring that this is a book that will interest specialists as well as novices.

Because so many different topics are covered, I can't comment on them all in this brief review. Instead, I will confine my remarks to a select few that I found especially interesting. In the last chapter, Garson offers a novel argument against dysfunction accounts of mental disorder. On a dysfunction account, as he spells it out, a mental illness is or is caused by a harmful failure of some mental mechanism to play its functional role, where its functional role is its adaptive role; the function of a mechanism is the role it played in evolutionary history that explains its species-typicality. Garson offers two arguments against this view, the first familiar and the second novel. The familiar argument is that the account leaves particular mental illnesses hostage to fortune in the future development of evolutionary theory. There are (admittedly speculative) accounts that explain psychopathy and depression as a consequence of a mismatch between the world in which most of us live and the environment of evolutionary adaptiveness. If one or other of these accounts is correct, then the apparent disorder would be explained by mental mechanisms playing the role for which they were selected, and psychopathy or depression would not be mental illnesses at all. This strikes Garson as unacceptable.

This familiar objection doesn't seem to me decisive. It is far from obvious to me that psychopathy is a mental illness, and I think it is wildly implausible that depression is fully explained by the mismatch theory (clinical depression is much longer lasting and deeper than the mismatch theory would predict). But Garson's second, novel, argument seems much stronger; moreover here we see the advantages of a strong background in philosophy of biology. As Garson suggests, there is strong evidence for the existence of an adaptive polymorphism of phenotypes, and a mismatch theory that focuses on a mismatch between one setting of a polymorphism and the actual environment in which a person is located seems more plausible than the evolutionary mismatch theory. Children of women who were pregnant in times of famine or war may be born preadapted for stressful environments, say: if they then find themselves in relatively comfortable environments, the mismatch between their dispositions and their actual circumstances may manifest as an impairment. That would appear to be a mental illness, yet it would be explained by mechanisms doing the job they were designed for.

Less successful, to my mind, is Garson's chapter on the neuroscience of free will. The chapter suffers from a lack of acquaintance with the literature outside philosophy of biology. For instance, Garson's claim that free will–in its deep metaphysical sense–turns on the agent's ability to do otherwise is denied by most specialists on the topic. Similarly, his explication of the everyday sense of free will ignores the experimental philosophy on the topic, some (though not all) of which suggests

that the ordinary conception is more metaphysically demanding than he suggests. More importantly, his confidence that were neuroscience to show that actions were routinely and reliably predictable seconds before a conscious decision it would thereby demonstrate that we lack free will seems misplaced in the light of controversies over the functional role of consciousness and the metaphysics of free will. While philosophy of biology and the tools it provides might be fruitfully applied to those questions, this does not justify the neglect of the wealth of existing work in cognitive science and metaphysics on the topic.

Garson is, unsurprisingly, especially strong on topics squarely within the purview of philosophy of biology, such as the nature/nurture controversy. He argues for the replacement of the concept of innateness, which is subject to well-known problems, with the concept of robustness. To say a trait is robust is not to say it is innate, because robustness is neutral as to the role of genes in its development and because traits can be robust which are, intuitively at least, not innate. The robustness/plasticity distinction can do a lot of the work we might have wanted the innate/acquired distinction to do. It can't do all the work, but that might be a virtue of the distinction, not a problem: the normative role that innateness has sometimes been called upon to play, in particular, may not be defensible.

Garson's book genuinely illuminates some issues by casting them in a new light, and it is always suggestive in the way it reconceptualizes problems as issues within the purview of philosophy of biology. While it is probably too demanding for the novice unaided, with the guidance of an instructor it should work well as an introductory text, especially, but not only, in courses on the philosophy of biology (I can imagine a general introduction course to philosophy built around it). Because it corrects for the neglect of philosophy of biology at the expense of neglecting other approaches, instructors will probably want to supplement it with other material.

In closing, let me remark on some features of Garson's epistemic outlook that strike me as distracting and unhelpful to novices, not to mention false. First, the grounds he gives for opposition to evolutionary approaches to the mind, of the kind exemplified by evolutionary psychology, seem to me too pessimistic with regard to our access to the relevant kinds of facts. He claims that these accounts cannot amount to anything more than speculation, because behaviours leave no fossils. This seriously underplays the role of convergent evidence in supporting these kinds of hypotheses. Work in ethology, anthropology, and archaeology may provide evidence for, or against, evolutionary hypotheses, and they generate testable hypotheses. That is not to say that evolutionary hypotheses have often passed the kind of epistemic test from convergent evidence I am proposing, but they may, in principle.

Garson's epistemic pessimism seems to extend to philosophy. On a number of occasions he makes asides about it that suggest he thinks of it as failing to meet very high epistemic standards. For example, he remarks that teleosemantics is not obviously wrong and that sometimes in philosophy that's the best we can hope for. This is surely false: the set of serious competitors for the best view on a philosophical topic which are no better than not obviously wrong is vanishingly small. Were I using this text in an introductory class, I would make an effort to avoid my students absorbing the overly self-effacing attitude that Garson too often exhibits: it suggests that philosophy is not essentially a truth-seeking enterprise.

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