Natural Ethical Facts: Evolution, Connectionism, and Moral Cognition. By WILLIAM CASEBEER. (Cambridge: MIT Press, 2003. Pp. x + 214. Price £19.05.)

The aim of William Casebeer's book is 'to show that, theoretically speaking, there is no reason to rule out a scientific naturalized ethics *tout court*, and that, practical speaking, by taking into account recent developments in evolutionary biology and the cognitive sciences, the outlines of one promising form of such an ethics can be sketched' (p. 1-2). The result is an interesting treatment of a wide variety of issues at the intersection of cognitive science, meta-ethics, normative theory, and evolutionary psychology, a treatment that is often suggestive but also frequently lacking in detailed argumentation.

Casebeer begins by responding to what he takes to be the most serious obstacles to a naturalistically acceptable moral realism, namely Hume's naturalistic fallacy and Moore's open-question argument. Fortunately for the realist, Casebeer alleges, both challenges can be met rather easily since both depend on there being an analytic/synthetic distinction, and Quine disabused us of that notion long ago.

The metaphysical side of Casebeer's positive view relies primarily on the reduction of all moral facts to functional facts, where the criteria determinative of proper and improper function are evolutionary criteria. Casebeer briefly criticizes the well-known accounts of function offered by Wright and Cummins in the service of motivating his own acceptance of Godfrey-Smith's view according to which 'functions are dispositions and powers which explain the recent maintenance of a trait in a selective context' (p. 52). By introducing considerations about recent

biological history, Casebeer argues that his account allows for the norms of proper function in an evolutionary view to be richer than mere reproductive success.

A particular normative theory ends up emerging from Casebeer's reduction of moral facts to functional facts – virtue ethics, or more specially Aristotle's virtue ethics. Casebeer briefly endorses, among other things, Aristotle's function argument and a dominant end construal of *eudaimonia*. Thus human beings as such have a *telos* or end, and contemplation 'will ultimately be the most admirable and self-sufficiently complete form of human endeavor, as it enables us to realize our essence as *rational* political animals' (p. 43).

Turning from moral metaphysics to moral psychology, Casebeer rejects computational theories of mind in favor of his own version of connectionism. In particular, he thinks that the connectionist should reject syntactically structured representations (*pace* Horgan and Tienson), and ends up construing cognitive mental states as bearing a relation to the world that is not in the first instance truth-functional but rather a matter of fitness or *eudaimonia* (p. 89). As a result, moral education on his view becomes far less a matter of 'knowing that' as it is of 'knowing how.' And moral judgments turn out to be the kind of things that a wide range of non-human organisms can come to form as well.

Casebeer proceeds to offer familiar criticisms of Kant's moral theory, and ends by outlining some of the practical implications of his virtue approach when it comes to the cultivation of deep friendships and the structure of character-developing institutions.

Casebeer is at his best when addressing recent work in evolutionary psychology and cognitive science, and he exhibits an impressive command of the vast literature in both areas. His treatment of topics in meta-ethics and normative theory, on the other hand, is less impressive, in

large part because he either omits important topics altogether or fails to engage with the extant literature.

In the case of the former, for example, there is no discussion of what many regard as the two most important challenges to moral realism, namely the motivation argument (motivational internalism and the Humean theory of motivation) and the reasons argument (moral rationalism and reasons internalism). Similarly, it would have been nice to see at least a brief treatment of Harman on moral explanations and Horgan and Timmons on moral twin earth.

In the case of the latter, Casebeer often makes assertions or articulates views without engaging with any of the important secondary literature on the relevant topic. For example, he merely reports some of the claims made in Quine's "Two Dogmas" without either (i) explicating Quine's claims, (ii) responding to important recent work on analyticity by Boghossian and Jackson, or (iii) evaluating the far more detailed and compelling responses to the open-question argument by Michael Smith and the Cornell realists. Similarly, Casebeer briefly summarizes certain features of Aristotle's complex view in five pages without taking any time to show, e.g., how the function argument is precisely meant to go or why we should accept a dominant rather than a constitutive end reading of Aristotle on *eudaimonia*. In particular, I would have appreciated some attempt to motivate Aristotle's own view (however understood) against the other virtue ethical theories now on the table, especially given the important naturalistic proposals recently made by Philippa Foot and Rosalind Hursthouse. Finally, Casebeer's quick objections to Kant are the familiar ones on maxim specification and dutiful motivation which contemporary Kantians have discussed in great detail and with considerable ingenuity. Yet aside from a few passing references in endnotes, this important work fails to get so much as a mention.

Let me briefly conclude with a more specific concern. Given that Casebeer reduces moral facts to facts about the evolutionary functioning of individuals or, in Aristotelian terms, to facts about what promotes their *eudaimonia*, it is far from clear how his view plausibly can secure the obligatory status of acts of charity and benevolence which are not obviously conducive to the well-being of the agents in question. Casebeer himself appreciates this concern, and has this to say: 'the option of simply ignoring the plight of those less fortunate than us can be ruled out as dysfunctional – human beings who are insensitive to the needs of those around them will be dysfunctional in myriad respects: they will not enter into productive social relationships that sustain the acquisition of base-level needs, and they will not partake of a rich and varied diet of social interactions . . .' (p. 63-64). So we ought to help those in need, not because they are suffering terribly or because they are intrinsically worthy of respect, but simply because doing so will safeguard our precious moral characters.

Casebeer's strategy for attempting to justify acts of charity may not be too surprising given the limited resources that both evolutionary and Aristotelian views have available for securing anything resembling agent-neutrality. What is perhaps more surprising is that Casebeer himself does nothing to help make such a justification palatable for readers like myself who find it to be grossly unacceptable.

Despite these concerns, William Casebeer's book does helpfully bring together many important topics which are too often treated in isolation. My hope is that it will help to foster further interdisciplinary work on these issues in the future.

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