

Evolutionary debunking arguments and the proximate/ultimate distinction

ANDREAS L. MOGENSEN

1. Introduction

It appears plausible that human morality is the product of evolution by natural selection. Many believe, in addition, that morality cannot have evolved due to selection for accuracy or reliability: those elements of our moral psychology that have conferred greater relative fitness have done so independent of the truth (or falsity) of any associated moral beliefs. In light of this, many philosophers have been led to conclude that natural selection explanations debunk our moral beliefs or would do so if moral realism were true.

An assumption widely shared by philosophers who put forward debunking arguments is that adaptationist explanations challenge our moral beliefs by showing that facts about right and wrong play no role in explaining why human beings hold the moral beliefs they do. Having argued that normative judgments have evolved for the sake of coordination, Gibbard concludes that

we do not need normative facts to explain our making the normative judgments we do. Our making them is to be explained by the rewards of coordination. To suppose that there are normative facts is gratuitous.
(Gibbard 1990: 107-108)

Similarly, Joyce claims that natural selection provides

an explanation of why humans would tend to employ moral predicates

regardless of whether those predicates have empty extensions, non-empty extensions, or (if we wish to countenance it) no extensions at all. (Joyce 2001: 158)

And Street claims that

to explain why human beings tend to make the normative judgments that we do, we do not need to suppose that these judgments are *true* ... Rather, all we need to suppose is that making these normative judgments (or rather “proto” versions of them) got us to act in ways that tended to promote reproductive success. (Street 2008: 209)

These authors believe that if we can explain human moral beliefs by appeal to truth-indifferent selection pressures, we should infer that moral facts are not needed to explain beliefs of that kind. Critics of debunking arguments characteristically grant this assumption and attempt to show that debunking implications need not follow (*e.g.* Enoch 2010; Wielenberg 2010; Brosnan 2011). By contrast, I will argue that the view that ethical facts are irrelevant in the explanation of our moral beliefs if these result from truth-indifferent selection pressures rests on a fallacy.

I'll begin in section 2 by explaining the nature of this fallacy, which relies on confusing different categories of biological explanations. In section 3, I relate the debate on evolutionary debunking arguments to the well-known moral explanations debate, arguing that these focus on orthogonal explanatory questions, contrary to what some philosophers believe. Finally, I consider how my objection plays out with respect to different particular debunking arguments. I suggest that debunking arguments need not be ruled out wholesale.

In particular, it remains possible that Street's Darwinian argument against meta-ethical realism can be reformulated so as to avoid the objection that I outline below.

2. Where debunking arguments go wrong

In his classic discussion of causation in biology, Mayr (1961) draws a well-known distinction between *proximate* and *ultimate causes*. Proximate causes are causes of a trait that operate within an organism's own lifetime: these might include the immediate triggering causes or the developmental factors responsible for its acquisition and expression. Ultimate causes belong to its evolutionary history: an explanation in terms of natural selection or phylogeny is an explanation in terms of ultimate causes.

In Mayr's work, the distinction between proximate and ultimate causes is connected to a number of more controversial theses, such as the separation of evolutionary and developmental biology. This separation is increasingly challenged (Leland et al. 2011). Nonetheless, the proximate/ultimate distinction is widely acknowledged, alongside the importance of keeping in mind that proximate and ultimate causes are *not* competing, but complementary. Natural selection is just one element in a broader explanatory picture in which proximate factors also play their part. Virtually every textbook on animal behaviour begins with the instruction that readers keep these points in mind and avoid confusing different levels of explanation.

I believe that proponents of evolutionary debunking arguments have fallen prey to just this sort of confusion. Let's grant that where a disposition to adopt certain moral beliefs has been favoured by selection, the truth of these beliefs will be irrelevant in explaining why these beliefs were reproductively advantageous. It doesn't follow that moral facts play no role in explaining why human beings have moral beliefs of that kind. Moral facts may play a role in explaining these beliefs in terms of their proximate causes. Nozick appears to have seen this point:

If ethical behavior increases inclusive fitness, this will explain the spread of such behavior in the population. Yet each individual's behavior, ancestor or descendant, might be explained by her recognizing certain ethical truths and acting on them. (Nozick 1981: 345)

An analogy will help to reinforce the objection. Imagine that insects in one species, *S1*, have a certain pattern of colouration that serves as camouflage: it resembles the surrounding foliage. Natural selection has favoured this pattern of colouration because it allows the insects to avoid predators. Suppose the pattern of colouration arises because juveniles eat a certain kind of moss during a critical developmental period. However, the fact that the juveniles have this diet is irrelevant in explaining why having this kind of colouration confers greater relative fitness: the colouration would be equally advantageous if it came about as a result of a different set of developmental factors.

In this case, we can explain why selection favours a certain pattern of colouration in *S1* and we can show that the fact that members of *S1* achieve this colouration by eating moss is irrelevant in explaining why that pattern of colouration is advantageous. Nonetheless, it would be silly to assume that we do not need to appeal to facts about the diet of juvenile insects in *S1* to explain their having the colouration they do. It would be absurd to insist that since their colouration is explained by the rewards of camouflage, a mossy diet is gratuitous as an explanatory factor. It would be similarly outlandish to insist that to explain why *S1* insects are coloured as they are, we do not need to suppose that they have a special diet during the juvenile stage; all we need to suppose is that having this pattern of colouration has tended to promote reproductive success in ancestral environments.

Anyone advancing these claims would be obviously guilty of confusing proximate and ultimate causes. However, the proponents of evolutionary debunking arguments

advance exactly analogous claims with respect to human moral beliefs. They argue that since we do not have to assume that human moral beliefs are true in order to explain why beliefs of that kind have proven reproductively advantageous, moral facts do not figure in the explanation of why human beings hold beliefs of that kind. This simply does not follow.

3. The moral explanations debate

Philosophers may be convinced on independent grounds that moral facts do not figure in explanations of human moral beliefs at the proximate level. Harman (1977) asks us to imagine that you see some children pour gasoline on a cat and ignite it, whereupon you immediately form the judgment that what they are doing is wrong. According to Harman (1977: 7), the fact that what the children are doing is wrong ‘would seem to be totally irrelevant to the explanation of your making the judgment you make.’ In the ensuing *moral explanations debate*, many philosophers accepted Harman’s claim on this point. Many others have rejected it, with Sturgeon (1985) in the forefront of those arguing that the wrongness of the action contributes to the explanation of your judgment.

Some philosophers, including Joyce (2006), have supposed that evolutionary considerations allow us to reinstate Harman’s challenge. However, Harman’s discussion focuses on the proximate causes of human moral beliefs: that is what is at issue in deciding whether the wrongness of burning the cat explains your judgment. Those, like Sturgeon, who were already convinced that moral facts are relevant in explaining our moral beliefs at this level have received no evidence to the contrary in light of the facts about ultimate causes appealed to in evolutionary debunking arguments. In that respect, evolutionary considerations do nothing to strengthen the problem posed by Harman.

Those who were already in agreement with Harman may not be too worried by the issue I’ve noted. Having already decided that moral facts are explanatorily irrelevant at the level of proximate causes, they might treat evolutionary accounts as closing off the

possibility that these same facts play a role when it comes to the ultimate causes of human moral beliefs. I doubt they were especially worried about this possibility in any case. The important point is that those who were *not* previously convinced by Harman have no reason to change their minds.

4. The arguments in detail

We'll now consider how these observations play out in respect of particular debunking arguments. Although some arguments are out of the running, I suggest that debunking arguments need not be ruled out wholesale.

4.1 Ockham's Razor

Let's begin with a clear casualty of my argument. Some claim that evolutionary explanations reveal moral facts to be explanatorily superfluous postulates of the kind we should excise from a parsimonious world-view. According to Joyce (2006: 195), once we understand how our moral judgments have evolved, 'Ockham's Razor will leave us with no reason to believe in moral facts.' Assuming that Ockham's Razor is supposed to rule out explanatorily superfluous postulates, this argument fails straightforwardly if moral facts explain our beliefs at the proximate level.

In fairness to Joyce, we should note that he does not entirely neglect questions of proximate causation. In light of evidence for the importance of emotion in moral judgment, Joyce (2006: 123-125) suggests that the proximate mechanisms favoured by selection as generating human moral judgments principally involve affective processes. However, this only describes the *internal* proximate causes of our moral judgments, and fails to address whether instantiations of moral properties sometimes act as *external* proximate causes. This is the crucial question. So far as I can see, it cannot be answered based on evidence about internal proximate causes, nor based on evidence about internal proximate causes taken in

conjunction with evidence about the ultimate causes of human moral judgments. It is a separate question altogether.

4.2 Sensitivity

Let's move on to consider those who argue that our moral beliefs are shown to be insensitive in light of natural selection explanations. Ruse tells me:

You would believe what you do about right and wrong, irrespective of whether or not a 'true' right and wrong existed! ... Given two worlds, identical except that one has an objective morality and the other does not, the humans therein would think and act in exactly the same ways. (Ruse 1986: 254)

If we suppose that moral facts play a critical explanatory role in bringing about our moral beliefs at the proximate level, it seems implausible that were there no such facts, we would have the very same moral beliefs. By analogy, were there no moss to eat during the juvenile stage, it seems implausible that *S1* insects would develop the very same camouflaging colouration, since the development of this trait depends on diet.

Ruse could reply that I am overlooking the issue of *functional equivalence*: the ability of natural selection to achieve the same result via different proximate mechanisms. Ruse might insist that if there were no moral facts, selection could find a different means by which to bring about human moral beliefs. After all, these beliefs would be equally advantageous.

However, the fact that this *could* in principle occur fails to show that it *would* occur. Furthermore, the argument is now vulnerable to a different objection. Sensitivity must be relativized to methods if it's to constitute an important epistemic good (Nozick 1981: 179-

185; Williamson 2000: 147-163). Seeing him alive and well, the grandmother knows that her grandson is healthy. Even if she knows that her family would tell her he was healthy even if he was sick and also that she would believe them, she knows he is not sick because she can see that he is well. What matters is whether one would believe p using *the very same method* even if p were false. In a world without moral facts, we might have had the same moral beliefs, but if we actually form our moral beliefs by responding to moral properties we would achieve the same beliefs only as a result of forming our moral beliefs in a different way. Because what matters is sensitivity relativized to methods, no skeptical implications follow from this.

Someone might object that we could in fact have used the very same method to arrive at the very same moral beliefs had there been no moral facts, even if the beliefs we actually form arise in response to moral properties: just because our beliefs do not arise in response to the same external facts does not show that a different method must be involved. Thus, many philosophers are inclined to count a case of veridical perception and an internally indistinguishable case of hallucination as involving the same method of belief-formation.

Even if we set aside the objections raised against this way of individuating methods by philosophers including Williamson (*ibid.*), my objection stands. The question is not whether we *could* in principle have achieved the same moral beliefs using the same method, but whether we *would* have done so. If the cognitive machinery on which our moral beliefs rely is genuinely responsive to moral properties, it seems implausible that the same internal mechanisms would produce the same beliefs in the same way were there no moral facts, even if this is possible in some sense. Similarly, perhaps we could in principle have experienced a sequence of hallucinations internally indistinguishable from the veridical experiences we have of cats if there had been no cats, but that is not really what would happen in the nearest feline-less world.

4.3 An implausible coincidence?

The final argument at which we'll look is Street's. This proves the most interesting case, I believe. Street argues that the evolutionary facts commit realists to an implausible coincidence. In some cases, she writes as if this coincidence is supposed to be that the beliefs favoured by selection accurately represent objective moral facts. Thus, Street insists that the

degree of overlap between the content of evaluative truth and the content of the judgements that natural selection pushed us in the direction of making begs for an explanation. (Street 2006: 125)

The realist is supposed to be forced to count this overlap as merely coincidental given that moral facts are irrelevant in accounting for the selection-pressures shaping human moral psychology.

Stated in these terms, her argument seems to fail in light of the points raised in this paper. We can dismiss the claim that our evolved moral beliefs can only be true by accident if we suppose that these beliefs are explained at the level of proximate causes in terms of corresponding moral facts. If the value of reciprocity explains my valuing reciprocity and the badness of pain explains why I believe pain is bad then these beliefs are not merely coincidentally true, even if they have evolved as a result of truth-indifferent selection pressures.

Street may have a reply to this objection. She might suppose that we can reinstate the problem by locating the coincidence elsewhere. On this proposal, the implausible coincidence isn't that our evolved ethical beliefs overlap with the objective moral facts. Rather, it is that beliefs that overlap with the objective moral facts have proven reproductively advantageous. If we grant that the truth of these beliefs doesn't explain why

they have increased the relative fitness of our ancestors, we may try to argue that it would have to be a startling coincidence that these beliefs were reproductively advantageous *and* represent objective moral facts, even though it is no coincidence that they represent objective moral facts.

It is not clear that the argument will be equally convincing stated in these terms. The original worry that our ethical beliefs could only be accurate as a matter of coincidence seemed to tap into familiar concerns about epistemic luck. It sounds *prima facie* plausible that I am not justified in believing p if I know that I could be right about p only as a matter of sheer coincidence (Bedke 2009). It is not so obvious why the coincidence described in the previous paragraph should represent a problematic commitment for the realist. There is no general ban on believing in coincidences, after all.

Whether the kind of coincidence to which realists remain committed is genuinely incredible turns ultimately on difficult and important questions about the nature and expectability of coincidences.¹ These unfortunately lie beyond the scope of this paper. Suppose, nonetheless, that Street's argument turns out to be comparably convincing under the reformulation described earlier and thus can't be ruled out as premised on a confusion of proximate and ultimate causes. Even so, our ability to convict the arguments of Joyce and Ruse on this count represents a significant result. This is especially true once we note the following important difference between these arguments.

Street argues that meta-ethical constructivism should be accepted over realism in light of facts about evolution, since the latter commits us to an incredible coincidence whereas the former does not. Her argument is not designed to debunk our first-order ethical beliefs. By contrast, Joyce and Ruse believe that evolutionary considerations support ethical skepticism. Ruse (1986: 253) wants us to concede that 'morality is a collective illusion foisted upon us by our genes.' Joyce (forthcoming) makes clear that his argument for

¹ See Mogensen (ms) for a critical appraisal of Street's argument, focused on these issues.

evolutionary moral skepticism is directed just as much against those who hold constructivist meta-ethical views as those holding realist views.

Suppose, then, that Street's is the only debunking argument still in the running: the only argument that doesn't rely on a confusion of proximate and ultimate explanatory factors. In that case, we should at least conclude that evolutionary considerations pose no significant challenge to our first-order normative beliefs, much as they might impact our understanding of the metaphysical status of ethical facts.

5. Conclusion

I've argued that we can't infer that moral facts do not explain our moral beliefs simply because beliefs of that kind have evolved as a result of truth-indifferent selection pressures. Those who draw this conclusion are confusing proximate and ultimate causes. This observation rules out arguments for evolutionary moral skepticism due to Ruse and Joyce. Street's Darwinian argument for meta-ethical constructivism may be capable of being reformulated so as to avoid this objection, though it's unclear that her argument remains equally convincing once the necessary revisions are made. Whether this is so turns ultimately on difficult questions about the nature and expectability of coincidences that will have to be answered in a different paper.²

All Souls College, University of Oxford

High Street, Oxford, OX1 4AL, United Kingdom

andreas.mogensen@all-souls.ox.ac.uk

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Abstract:

Many philosophers believe that natural selection explanations debunk our moral beliefs or would do so if moral realism were true, relying on the assumption that explanations of this kind show that moral facts play no role in explaining human moral beliefs. Here I argue that this assumption rests on a confusion of proximate and ultimate explanatory factors. Insofar as evolutionary debunking arguments hinge on the assumption that moral facts play no role in explaining human moral beliefs, these arguments fall short.

Keywords:

evolutionary debunking arguments; causation in biology; meta-ethics; moral epistemology;