Atheism, Naturalism, and Morality[[1]](#footnote-1)

 It is a commonly held view that the existence of moral value somehow depends upon the existence of God. Some proponents of this view take the very strong position that atheism *entails* that there is no moral value; but most take the weaker position that atheism cannot *explain* what moral value is, or how it could have come into being. Call the first position *Incompatibility*, and the second position *Inadequacy.[[2]](#footnote-2)* In this paper, I will focus on the arguments for Inadequacy. There are two main arguments for this position: the Argument from Arbitrariness and the Screening-Off Argument. I’ll discuss each in turn., and argue that neither is successful. To conclude, I’ll sketch what I think is a promising beginning to a naturalistic account of Morality.

1. *Preliminaries*

Let me start by specifying more precisely the theses with which I’m concerned.

 By *God* I will mean “a unique, eternal, necessarily existing, immaterial, omniscient, omnipotent, and perfectly benevolent being. *Theism*, then, is the doctrine that God, so defined, exists. *Atheism* will be the denial of Theism.

 I’ll use the term *Morality* to refer to the doctrine that there is moral value in the universe. The doctrine, so formulated, is meant to be neutral on substantive questions in normative theory, such as the debate between consequentialists and deontologists. In other words, if *any* normative theory is true, then so is Morality. The denial of Morality is the thesis I’ll call *Nihilism*.

 The thesis that I will defend, *Normative Independence*,[[3]](#footnote-3) is the thesis that moral value is independent of the existence of God. *Normative Dependence* is the contradictory thesis; it says that moral value depends upon the existence of God.

 It is obvious that there is no formal contradiction between Atheism and Morality, so if there is some incompatibility between the two, it must be because of additional principles to which one or both of these doctrines is committed. Proponents of Dependence recognize this logical point, and accordingly, draw on broader ontological and methodological principles to which they presume Atheists are committed, the principles of *Materialism* and *Naturalism*.[[4]](#footnote-4)

*Materialism*: Every concrete thing is either composed of or realized in matter.

*Naturalism*: Everything that can be explained at all, can be explained in terms of natural processes.

In fact, not all atheists are committed to these two tenets,[[5]](#footnote-5) but most probably are. In any case, I’m prepared to argue that neither doctrine conflicts in any way with Morality.

 Arguments for Incompatibility tend to focus on Materialism, while arguments for Inadequacy appeal to Naturalism. Since I’m focusing on Inadequacy, I’ll set aside concerns about Materialism, and discuss only the arguments directed at Naturalism.

1. *Inadequacy*

 Proponents of what I’m calling Inadequacy claim that Atheism, in virtue of its commitment to Naturalism, cannot answer some very important questions about our ethical attitudes, dispositions, and behavior, and about the origin of value itself. Since the atheist, *qua* naturalist, denies the existence of supernatural beings and forces, she allegedly has no resources for explaining either the existence of objective moral value or the emergence of creatures with ethical attitudes, dispositions, and behavior (what I’ll refer to hereafter as *ethical creatures*). I acknowledge that these are indeed difficult issues in meta-ethics, but my position is that the theist has no advantage over the atheist with respect to them.

 Let’s turn first to theism. Theists who criticize naturalism for its failure to account for either the existence of moral value or the existence of creatures sensitive to it, presume that theism *can* offer such accounts. The theist will say that moral value is grounded in God, and that the existence of creatures with ethical natures is explained by God’s deliberate creation of beings in His image.[[6]](#footnote-6) But I challenge the adequacy of *this* story. There are two problems with it: the first is the much-discussed *Euthyphro* problem, and the second is the hardly-ever-discussed problem of competing supernatural explanations.

 The adequacy of the theist’s meta-ethical story depends on the assumption that moral goodness is somehow grounded in God. (If goodness is independent of God, then the theist is in the same boat as the (atheistic) naturalist.) But those who make this assumption must confront the *Euthyphro* problem. Many theists believe that the problem has been solved, but many atheists (myself included) reject the solutions that theists have proposed. I have given my reasons for thinking that the *Euthyphro* problem cannot be solved, and I won’t rehearse them all again here.[[7]](#footnote-7) My point now is simply that the theist doesn’t get his meta-ethics for free.

 But setting aside the Euthyphro issue, there is still a second problem that the theist must confront. Suppose I were to concede that the theistic hypothesis makes the existence of moral facts and ethical creatures more likely than does the naturalistic hypothesis. That would give theism an edge over naturalism, since theism better predicts, and to that extent, better explains the ethical facts. The problem I want to raise now, however, is that the theist can’t quit at this point. Theism does not do any better, and may do worse at explaining the moral appearances than a number of alternative *supernatural* hypotheses. I’ll list just a few (with a nod to David Hume)[[8]](#footnote-8):

1. there is an all-powerful, all-knowing *malevolent* being who created the universe.
2. There is all-powerful, all-knowing, *morally* *indifferent* being who created the universe.
3. There is a *very* powerful, but not omnipotent, benevolent being who created the universe.
4. There are two contending beings, one a very powerful, but not omnipotent benevolent being who created the universe, and the other an equally powerful malevolent being who constantly interferes in the affairs of the creatures created by the benevolent being.

We can flesh out any of these stories in a way that would make it competitive with the theistic hypothesis in terms of explaining the normative appearances. For example, a malevolent being with the (so-called) natural powers of God might find it amusing to create beings with physical natures that incline them sharply against the “ethical norms” to which they’ve been programmed to be sensitive. “Give them nearly irresistible sexual appetites,” such a being might muse, “then tell them they’ll suffer eternal torment if they indulge them.” I daresay this hypothesis explains a good deal of human history.

 My serious point is that it is the *intentions* of the creator being that carry all the explanatory weight in the theistic story. God may be inherently good – indeed, the source of all goodness – but this doesn’t immediately give us an explanation of why there are finite creatures with ethical natures unless assumptions are made about what God *intended* in creating such beings. Once we freely consider the different kinds of intentions that might have resulted in a powerful being’s making creatures such as ourselves, and cross that assortment with the set of different kinds (and numbers!) of creator-beings, we get an unlimited set of (at least) equally explanatory hypotheses.

 The theist may want to counter this consideration by saying that the theistic hypothesis has a great deal more evidence in its favor than any of the wacky supernatural alternatives I’ve surveyed, citing text, religious experience, and (nearly) universal assent. Fine – I am willing to grant for the sake of argument that such evidence exists, and that it is probative. But the important thing to note here is that if the theist can eliminate equally explanatory alternatives to his own hypothesis on the basis of additional evidence for the overall plausibility of traditional theism, then the naturalist should get to do the same. In that case, the exercise changes: instead of considering which hypothesis, theism or naturalism, gives the better explanation of a *single* explanandum, Morality, we now have to consider which hypothesis does the best job explaining *our total evidence*. I am confident that the atheist will prevail in this contest (otherwise I wouldn’t be one). But my point here is that the theist who defends Dependence cannot get the *meta-ethics* he wants as easily as he thinks he can.

 Let me turn now to the question of the origin of ethical creatures. Even if a theist concedes, for the sake of argument, that naturalism can say something sensible about the basis of moral value itself, there is still supposed to be a serious problem about the emergence of ethical creatures. Naturalism, as was conceded above, must explain everything in terms of wholly natural processes. But this, according to proponents of Inadequacy, presents the atheist with a dilemma: She must say either that ethical beings developed as a matter of chance, or else she must attribute their emergence to processes that are sensitive to natural, non-normative properties. In the first case, the naturalist can give *no* explanation of the emergence of ethical creatures, and in the second case, the naturalist will give the *wrong kind* of explanation.

 I’ll call the first horn of this dilemma *Arbitrariness* and the second horn *Screening-Off.*  Arguments from Arbitrariness say that even if there is a naturalistic account of objective moral value, it’s only a matter of chance that our ethical natures align with it; arguments from Screening-Off say that our ethical natures are determined to align with something *other than* the ethical facts. Whether that leads to skepticism or to nihilism depends on further assumptions, but either way, the atheist loses.[[9]](#footnote-9)

 Philosopher Paul Copan provides a good example of an argument from Arbitrariness. He is willing, for the sake of this argument, to suppose that the naturalist can make sense of the idea that there are objective moral facts. Still, he argues, naturalism cannot explain how wholly natural processes could have been expected to produce creatures sensitive to those facts.

Let’s assume that moral facts are necessarily part of the universe’s furniture and that [morally valuable] beings luckily evolved via a tortuous, profoundly contingent series of unguided physical events to be morally constituted and thus obligated to those preexisting facts. It is strange *in excelsis* and staggeringly coincidental that these moral facts should (a) “just exist” and (b) perfectly correspond to intrinsically valuable beings that happen to emerge so late on the cosmic scene.[[10]](#footnote-10)

What exactly is Copan saying in this passage? It’s clear that he is endorsing the comparative claim I granted earlier for the sake of argument, viz., that the emergence of ethical creatures is more likely given theism, than it is given naturalism. But this doesn’t gives much advantage to the theist. The comparative claim doesn’t entail, for example the categorical claim that if naturalism is true, then Morality is likely to be false. But I don’t accuse Copan of making the mistake of thinking that it does.

 Rather, I think that Copan is trying to establish something about the *justification* of our ethical beliefs. After all, the thing he says is “strange *in excelsis* and staggeringly coincidental” is that there should be convergence between the (presumed) moral facts and the beliefs of creatures who evolved through natural processes. Since such processes are insensitive to moral properties, if they happen to give rise to creatures whose ethical beliefs are true, those beliefs can only be *luckily* true. Luckily true beliefs are unjustified, and thus cannot constitute knowledge. In sum: Copan is arguing that naturalism entails moral skepticism.

 Copan appears to be relying on an intuitive epistemological principle about the relationship between the etiology of belief and the belief’s epistemic status, one that is rather widely endorsed, by naturalists and theists alike. Mark Linville calls this principle *Independence*. (I will call it *Epistemic Independence*, or *E-Independence*, for short – see FN 2.) Linville doesn’t give a canonical formulation of the principle, but I believe the following would be acceptable to him:

*E-Independence*: For a set of beliefs in a given domain, we have reason to doubt the justifiedness of those beliefs if the processes by which those beliefs were formed is insensitive to the truthmakers for those beliefs.[[11]](#footnote-11)

Linville, in his careful discussion of this principle and of the arguments that employ it, points out that the principle is accepted in at least some form by many prominent naturalists, including, notably, Elliot Sober and Sharon Street.[[12]](#footnote-12) To motivate the principle, Linville borrows an example from Sober.[[13]](#footnote-13) footnote

 The set-up involves an eccentric professor, Ben, who forms his beliefs about the size of his class enrollments by drawing a single slip of paper from an urn that has been pre-stocked with 100 slips of paper, each bearing a different number from 1 to 100. In a particular case, Ben draws a 73, and duly forms the belief that he has 73 students in his class.

 What can we infer about the epistemic status of Ben’s belief? Knowing what we know about the method by which Ben fixes his belief – a method that is in no way conditioned by or dependent upon the number of students actually enrolled in Ben’s class – it is clear that Ben’s belief is unjustified. And if it turns out that in this particular case, the number 73 just happens to be the number of students enrolled in Ben’s class, then Ben’s belief, although true, would be only *luckily* true.

 Copan, then, can be construed as appealing to E-Independence in the same way Sober does in his example. Copan is arguing that *if* there happens to be a convergence between the ethical beliefs of creatures who evolved by chance and the actual moral facts, that can only be an accident. Thus, if naturalism were true, then our ethical beliefs would be just as arbitrary as Ben’s beliefs about the size of his class. And since Ben has no warrant for his beliefs, neither would anyone have warrant for their ethical beliefs if naturalism were true. Thus, naturalists ought to be moral skeptics.

 This line of thought however, neglects an important factor, one that Sober brings out. When we talk about the etiology of belief, we can mean at least two different things. We can be considering the etiology of a particular belief, or we can be considering the etiology of a belief-forming *capacity*. Since we are talking about phylogeny – species history -- we are presumably talking about a capacity, rather than any particular beliefs that an individual might form. To make this kind of case against naturalism – that it cannot explain the emergence of a capacity for moral judgment -- Sober points out that several things would be necessary. First, it would be necessary to establish that there is a belief-forming capacity that is specific to the domain of moral fact, and second, it would have to be shown that that domain-specific belief-forming capacity was not shaped by the moral facts. This first requirement is not at all trivial. There is no general reason to think that, for every topic on which we are capable of forming beliefs, there is a topic-specific mechanism responsible for the formation of those beliefs. Such “modular” mechanisms have been posited for perceptual processing, and for certain cognitive achievements like the acquisition of human language and the mastery of folk psychology and folk physics, where the achievements in question emerge early and are complicated in ways that outstrip the informational content of the stimuli that prompt their emergence.[[14]](#footnote-14) But there are many other cognitive achievements, like the ability to play chess well, that are almost certainly *not* the product of native, specialized cognitive mechanisms, but rather the result of general learning strategies. It is a wide-open empirical question whether moral reasoning is more like language or more like chess. If the latter option is correct, then “moral reasoning” would not be the sort of trait that is subject to natural selection; the capacity to reason about morality would simply come along with our capacity to reason in general. And there is no reason to think that the ability to reason developed without being shaped by objective logical relationships.

 Still, there are some theoristswho think that moral reasoning *is* subserved by an innate moral reasoning module.[[15]](#footnote-15) If these theorists are right, wouldn’t Copan’s objection have renewed force?

 Actually, no. I appeal here to work by Roger White. In his paper “You Just Believe That Because…”[[16]](#footnote-16) White challenges the principle I’m calling E-Independence. He argues that there is nothing about the etiology of a belief-forming capacity that directly bears on the *reliability* of that capacity. It might be *unlikely* that a reliable capacity will arise by chance. Nonetheless, if we have direct evidence that an extant capacity *is* reliable, then the fact that its origin was chancy should do nothing to reduce our confidence in it. Suppose that a computer manufacturer decides, for its own reasons, to place defective logic processors into half of its computers, chosen randomly. For buyers, that means that half of them will have perfectly good and reliable computers, while half of them will have computers the calculations of which are untrustworthy. If you are one of the lucky buyers, then you are *lucky* *in having* a reliable computer, but it is not a matter of luck that your computer’s calculations are all correct. The situation doesn’t change if, instead of equipping half the computers with faulty chips, the manufacturer mucks up all but one computer – the one you *luckily* bought. *Your* computer is as reliable as can be, despite the fact that you were extraordinarily lucky in getting the one you happened to buy.

 The moral is that there is nothing about the randomness of the origins of a capacity that determines the degree of reliability of that capacity. Ben, in Sober’s example, is using an unreliable method to form his belief. But suppose that what is random in the case is Ben’s choice of method. And suppose that, among the methods Ben has to choose from is a reliable one – say, consulting the class list on the registrar’s website. *If* he luckily chooses that method, then the process he employs to form his belief about his class size will be a good one.

 But at this point, the theist (or any defender of the principle of E-independence) may point out that even if Ben chooses a reliable method – and correlatively, even if natural selection throws up a reliable capacity for moral reasoning – there is still an epistemic problem. If Ben *luckily* chooses a belief-forming method that *happens* to be reliable, it doesn’t follow that the belief Ben subsequently forms about his class size is justified *for Ben*. Ben has no rational grounds for thinking that the method he chose is reliable, and so no rational grounds for believing what he believes about his class size. Ben ought to be a skeptic about class sizes. Similarly, if we human beings luckily hit the evolutionary jackpot and luckily possess, in consequence, a reliable capacity for moral reasoning, we would still have no rational basis for trusting our individual moral judgments.

 But now we are back to a point made earlier. It’s true that our having reliable moral faculties is more probable given theism, than given naturalism. But that does *not* mean that if naturalism is true, we have no justification for the moral judgments we make. To see if an individual judgment is true, we need to take into account all available evidence. If *that* supports our judgment, then the initial relative improbability of our being able to make such judgments becomes irrelevant.

 White makes the point in connection with an analogy Sharon Street sketches, one that Linville cites with approval. Street says that it could be only a matter of luck if naturally evolved capacities happened to track truths in a Platonic realm of normative truth, and rejects moral realism because of this consequence. She writes that

allowing our evaluative judgments to be shaped by evolutionary influences is analogous to setting out for Bermuda and letting the course of your boat be determined by the wind and tides: just as the push of the wind and tides on your boat has nothing to do with where you want to go, so the historical push of natural selection on the content of our evaluative judgments has nothing to do with evaluative truth.[[17]](#footnote-17) (Street, 2006, p. 13 cited by Linville 396 and White 589 – Straighten this out – citations don’t agree)

 White points out, however, that Street’s analogy does not support the skeptical conclusion she draws. Of course, he says, we would have no basis for thinking that we will wind up in Bermuda *while we’re at sea*, but

once we come ashore and see the people and street signs and resorts there can be little doubt that we have arrived at Bermuda (even if we must marvel at our good fortune!).[[18]](#footnote-18)

 In short, no naturalist need be embarrassed by the possibility that it is just a matter of chance that we have the moral capacities that we have. However those capacities emerged, we can assess the judgments they produce in the normal way, through reason and evidence.

 Now the theist might object that it’s question-begging for me to appeal to the evidence and reasoning that we ordinarily take to support our moral judgments. But doing so would undercut his own argument. The argument from Inadequacy is meant to be a *reductio* – it is supposed to show that if naturalism is true, then we have no moral knowledge. But then the theist needs the premise “but we *do* have moral knowledge” to derive the contradiction. Whatever evidence the theist can cite in support of that needed premise, the naturalist can co-opt.

*Screening-Off*

 Recall the dilemma posed to the naturalist: either the emergence of our moral capacities was a matter of chance, or it was shaped by purely natural factors. I’ve just argued that there is no danger to the naturalist if it turns out that we were simply lucky to have the moral capacities we have. I’ll now argue that the second horn poses no threat, either.

 The leading thought behind the second horn is this: if our moral capacities have been shaped by natural processes, then they are responsive to those natural properties, *rather than* the moral properties they are supposed to track. In that case, the argument goes, the beliefs and dispositions we take to be ethical do not have the content we think they do – their content is actually determined by the non-normative, natural properties that shaped them.

 One very popular version of this argument appeals to the naturalist’s presumed commitment to evolution:

1. If naturalism is true, then human ethical beliefs and dispositions are the product of evolution.
2. If so, then we only have the ethical beliefs we have because having them was adaptive.
3. Therefore, our “ethical” beliefs and dispositions are really just disguised self-interest.

This sort of argument can be found in the writings of naturalists and atheists, as well as in work by theists who embrace Inadequacy.[[19]](#footnote-19) But the argument doesn’t work, for at least two reasons.

 The first reason is that the argument presumes that natural selection is the only mechanism of evolution. This assumption is false, as biologists Richard Lewontin and Stephen Jay Gould took pains to point out. Some phenotypic traits that look like adaptations turn out to be “spandrels” – properties the organism has because of physical constraints inherent in the developing organism, rather than because of the trait’s role in survival. The ridges on some clam shells, for example, help the clams survive by enabling them to anchor themselves in ocean beds where they can filter the shifting waters for food. The ridges really do serve that function, but they aren’t there *because* they serve that function – they are there as a physically necessary by-product of the growth process of setting down layers of shell.[[20]](#footnote-20) Similarly, it could be that our capacity to appreciate and reason about moral matters is a spandrel, a bonus that came along for the ride with our primary cognitive capacities, perhaps in interaction with faculties of empathic perception and self-consciousness.

 The second and more serious problem with the argument is that it’s invalid. Even if we grant that our moral capacities are the result of natural selection, it wouldn’t follow that the beliefs we regard as ethical are “really” about self-interest or the survival of our genes. Natural selection cannot work directly on the content of cognitive states; it has to work by selecting *behavior.* The same behavior, differently caused, would produce the same fitness effects. So consider some type of behavior that is plausibly adaptive in the evolutionary sense, like parental protection. Natural selection is going to favor organisms who display this behavior, no matter how the behavior is caused.

 Creatures who were just like us except that their protective behavior was caused by a subconscious biological imperative – an instinct, if you like – such creatures would do just as well as we’ve done in the struggle for survival. But this consideration does not in any way tell against the common sense observation that the reason *we* protect *our* children is that we *love* them. Since loving your children has the same behavioral effects as would a mindless instinct to protect them, natural selection is *fine with it*. Natural selection doesn’t care *why* you help your children survive and flourish, it only cares *that* they survive and flourish.

 There is an interesting variant on the standard screening-off argument that I want now to consider, one suggested by Mark Linville. He introduces the argument by quoting a passage from Darwin:

The following proposition seems to me in a high degree probable—namely, that any animal whatever, endowed with well-marked social instincts, the parental and filial affections being here included, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well, or nearly as well developed, as in man[[21]](#footnote-21)

To my mind, Darwin is here endorsing as likely the possibility that I sketched above, namely, that our capacity for ethics has emerged as an interaction effect among several systems and capacities that were selected (if they were selected at all) for other functions. I read this passage, then, as a first step in the direction of a naturalistic account of moral realism.

 Linville, however, reads it in a different way. He takes Darwin to be emphasizing the degree to which “ethical” attitudes in a creature are conditioned to arbitrary features of its *modus vivendi*. He writes:

Wolves in a pack know their place in the social hierarchy. A lower-ranked wolf feels compelled to give way to the alpha male. Were he endowed with the intellectual powers that Darwin had in mind, then, presumably, his “moral sense” would tell him that obeisance is his moral duty. He would regard it as a moral fact that alpha interests trump beta or omega interests. [[22]](#footnote-22)

 Setting aside the question of what Darwin meant, I find Linville’s suggestion perplexing. He seems to be supposing that there was a pre-existing fitness-enhancing mode of human interaction, to which an emerging self-consciousness added nothing but a reflexive lionization of whatever those patterns of interaction happened to be. That leads to the idea, I guess, that *any* pattern of behavior could have been deemed “ethical” had the creatures who displayed it to evolve the right cognitive equipment. Biology gets us to do whatever it is we need to survive, and then our hyperactive consciousness constructs an ethical rationalization for it.

 Now some atheist philosophers have reasoned in this way. Paul Copan cites the naturalist philosopher Michael Ruse as evidence that atheists themselves recognize that their view has the consequence that *any* fitness-enhancing behavior *could* have been polished into an ethical system, if the creatures displaying it had only evolved to be sufficiently clever.

Michael Ruse offers this counterfactual: instead of evolving from “savannah-dwelling primates,” we, like termites, could have evolved needing “to dwell in darkness, eat each other’s faeces, and cannibalise the dead.” If the latter were the case, we would “extol such acts as beautiful and moral” and “find it morally disgusting to live in the open air, dispose of body waste and bury the dead.”[[23]](#footnote-23)

 But why think this, when the actual development of human systems of morality has decidedly *not* followed this pattern? That is, human moral systems do not simply endorse and prescribe behavior that happens to “work,” biologically speaking. Little is known, of course, about the social rules and mores of our prehistoric ancestors. But we do know, from the earliest available written records, that human beings from antiquity onward have engaged in moral *reasoning* and moral *critique.* The ancients sought to systematize and ground ethical imperatives, and frequently criticized the ethical *status quo*. Reformers and revolutionaries, whether religious or civil, have called for change in the name of newly articulated moral precepts. And in at least some places, and at some times, societies have moved toward greater justice and greater sympathy, and have done so in the name of moral principles which have nothing directly to do with behavioral tropes that were adaptive in the Pleistocene.

 In short, I think that Linville’s wolves would surprise him. If they developed the cognitive tools to notice and reflect upon their social practice, it might occur to a few of them that the benefits of their rigid hierarchical social system could be realized without granting absolute power to any one wolf. They might become aware of dangers to the pack that come with the volatile nature of the alpha male’s aggressive disposition, and think of ways of constraining his authority. The female wolves might begin to resent their relative powerlessness, and agitate (perhaps backed by a Lysistrata-style protest) for more say in pack decisions. Why not?

 In sum, screening-off arguments boil down to a challenge to moral realists to defend their claims that our so-called ethical reasoning and our so-called moral principles really have the moral content that we moral realists say they do. But the screening-off argument mistakenly infers from the fact (let’s suppose it is one) that behaving in accordance with moral norms might have been adaptive in the ancestral environment, that the *explanation* for such behavior is that it enhances fitness. But the fact that an action has a certain effect hardly means that the action was performed *in order to achieve that effect*. Consider the fact that when I want to visit my children in California, I take a jet plane. Jet planes burn fossil fuels. So it is an effect of my going to visit my kids that I contribute to global warming. I hope you will believe me, however, when I say that it is no part of my *intention*, and thus no part of the explanation of my action, to contribute to global warming. My contribution to that problem is, as the Catholic Church might put it, a *foreseen but unintended* consequence.

 Similarly, if my care and attention toward my children contributes to the likelihood that my genes will be represented in future generations, that’s as it may be, but it has nothing to do with my motives. Proponents of screening-off contend that if it was adaptive for human parents to experience the state we call “love,” the state would not really be *love*. But we can see now that that is fallacious. If parental love – a psychological state with a particular content – leads parents to invest energy in the care of their offspring, then *parental love* will get *selected*, even if it’s the caring behavior rather than the love itself that is selected *for*. Evolution is indifferent to the explanation *why* the parental energy is invested; it only cares *that it is invested*. It may be true that the “nurturing” behavior of some species is illusory – that the parent organisms in such species are simply triggered, biologically, to engage in behavior that happens to increase their offspring’s chances for survival. But that doesn’t mean that human parental investment is secured by the same mechanism. We have excellent evidence that psychological states – loving one’s children, recognizing one’s duty – play a role in good parenting among humans, and the theory of natural selection gives us no reason to think otherwise. Evolution is as happy with psychological mechanisms as with biologically rigid instincts, if they get the job done. And if the mechanisms are allowed to be psychological, evolution tells us nothing about their contents.

 The only way, in fact, to find out what actually motivates human beings, is to directly study what motivates human beings. When we do that, we discover (what most of us actually knew already, viz.) that human beings *do* act, at least some of the time, on the basis of *ethical* reasons. In short, there is nothing in naturalism that entails that human beings either can’t have or don’t have genuinely ethical beliefs and dispositions, and this is true even if our ancestors’ having such beliefs and dispositions contributed to their evolutionary fitness.

*Could Moral Reality Have Shaped Our Ethical Attitudes?*

 I’ve been arguing that neither the supposition that our moral capacities evolved by chance, nor the supposition that those capacities became fixed in our ancestral population because of their contribution to our ancestors’ evolutionary fitness, give us any reason to doubt that these capacities are genuinely moral, nor that they put us in touch with objective moral truth. But having argued that there is no good reason to accept the principle of E-Independence, I want now to explore the possibility that the development of our moral capacities might have been shaped by normative properties after all.

 I’ve been defending naturalism, but to build the strongest case I can for the “atheistic worldview,” now I’ll throw in materialism for good measure. Materialism says that the world is homogenous at the micro-level, and in this way affirms that everything is, ultimately “nothing but” quarks (or whatever the fundamental particles turn out to be).[[24]](#footnote-24) But that doesn’t mean that the materialist must say that *all there is* is quarks. Varying arrangements of quarks give rise to great variety at the *macro*-level. The various phenomena that “emerge” when we abstract from the microphysical details fall into regularities of their own, regularities that form the domains of chemistry, biology, geology – the so-called “special sciences.” These sciences discover regularities among the things that can be made out of quarks, regularities that involve properties other than the properties recognized by physics. Such regularities will have more limited scope than the laws of physics – that’s why the sciences in which they appear are called “special” – but they do function in the way laws are supposed to – they ground explanations and generate predictions.

 Human beings fall into a particularly special class of macro-phenomena. The quarks that constitute us are arranged so that we have brains and nervous systems that support a *psychology*. To have a psychology is to have the capacity to form *mental representations*, and to use those representations in guiding interactions with the environment and with other creatures. Creatures with psychologies can integrate representations of the way the world is (*beliefs*) with representations of the way they’d like the world to be (*desires*) and choose a course of action that *makes sense*, given those beliefs and desires. Most impressively, some creatures with psychologies (guess who?) can also use representations to *reason* – to generate new beliefs on the basis of evidence, and to discern logical relations among their beliefs.[[25]](#footnote-25)

 Creatures with these extended representational capacities can make themselves sensitive to a certain class of properties – what we might call (somewhat misleadingly) *theoretical* properties. These are properties, roughly, that a creature can only know about by *inference* from properties available to the senses. Thus, any visually sensate creature can detect the size, shape, and color of a *hammer*, but only a creature that can infer or remember the purpose of such an object can *see that* it is a hammer. Psychological properties are themselves, in this sense, theoretical properties. It takes a *meta*-representational capacity to be able to recognize other beings as representers, as creatures with beliefs, desires, intentions, or emotions.

 Ethical properties, too, are theoretical properties, involving, crucially, the capacity to see other creatures as psychological beings. It can be *seen* – in the literal sense of “visually perceive” – that one creature is colliding with another, but it takes psychological inference to classify the event as a case of one creature’s *attacking* another, and a further inference to conclude that it is a case of *aggression*. It can be seen that one creature has five apples and another only one, but it takes iterated inferences to see such a distribution as *unfair*. Human beings can and do perform such inferences.

 Because of our representational and meta-representational capacities, we are sensitive to the factors that can provide a naturalistic grounding of normative facts. Such factors include, for example, that there are other sensate creatures, capable of experiencing pain, and other cognitive creatures, with desires and plans they wish to fulfill.

 Psychology thus offers a naturalistically sound supplement to natural selection as a way of explaining the emergence of certain kinds of order in the world. Creatures who are able to *think* can generate regularities that otherwise would not exist, specifically, regularities that involve *rational*, rather than *merely causal factors.* Ask a hundred schoolchildren to add two and two, and you’ll get “four” (close to) a hundred times. The explanation is not that there is a brute causal regularity between utterances of the question and utterances of the answer; it is rather, that the children are sensitive to the *content* of the question, and that they *know* the right answer.

 I claim that there is a rational relation – a relation of making sense – between the naturalistic factors that are in fact ethically significant, and the contents of the ethical beliefs that we form in response. If so, we have, at least in prospect, a naturalistically sound way of explaining how our ethical beliefs could have been shaped by normatively significant factors. [[26]](#footnote-26)

1. My thanks to Joseph Levine, Peter Graham, and especially to Justin Mooney for discussions of the arguments in this paper, and to Ray Van Arragon for his excellent editorial advice. [↑](#footnote-ref-1)
2. I criticize arguments that focus on materialism in Louise Antony, “The Failure of Moral Arguments” In *Debating Christian Theism*, J. P. Moreland, Khaldoun A. Sweis, and Chad Meister, eds. (New York: Oxford University Press, 2013), 101-15. [↑](#footnote-ref-2)
3. The qualifier *Normative* is meant to distinguish this thesis from an epistemological thesis that Mark Linville calls, simply, *Independence*. I’ll be discussing that other thesis, which I’ll call *Epistemic Independence*, or *E-Independence* in Part II below. In what follows, I’ll use the unqualified terms “Independence” and “Dependence” to signify the doctrines about normativity, and use “E-Independence” to signify the epistemological principle. [↑](#footnote-ref-3)
4. William Lane Craig says that these two theses constitute the “Atheistic Worldview.” See William Lane Craig, “Opening Statement,” Debate with Louise Antony sponsored by the Veritas Forum, April 10, 2008. https://www.youtube.com/watch?v=6MhS8nU6ECM. Paul Copan more or less identifies atheism with naturalism here: Paul Copan, “Ethics Needs God,” (*Debating Christian Theism*, J. P. Moreland, Chad Meister and Khaldoun A. Sweis, eds., (New York: Oxford University Press, 2013), 85-100. See especially pp. 86-92. [↑](#footnote-ref-4)
5. Joseph Levine and David Chalmers are dualists and atheists. Levine, “From Yeshiva Bochur to Secular Humanist,” in *Philosophers Without Gods: Meditations on Atheism and the Secular Life,* Louise Antony, ed., (New York: Oxford University Press, 2007, 17-31). Chalmers, personal correspondence. Thomas Nagel rejects naturalism but does not embrace theism. See Thomas Nagel, *Mind and Cosmos* (New York: Oxford University Press, 2012), p. 22. [↑](#footnote-ref-5)
6. For two examples among many, see Paul Copan (*op. cit.*), pp. 92-5 and Mark Linville, “The Moral Argument,” In William Lane Craig & J. P. Moreland (eds.), [*The Blackwell Companion to Natural Theology*](https://philpapers.org/rec/CRATBC). (Oxford: Blackwell Publishers, 2009) pp. 391--448. [↑](#footnote-ref-6)
7. See my “The Failure of Moral Arguments,” in *Debating Christian Theism*. Copan criticizes my appeal to the Euthyphro argument in his “Ethics Needs God,” in *Debating Christian Theism*, 85-100. [↑](#footnote-ref-7)
8. See David Hume, *Dialogues Concerning Natural Religion*, 2nd Edition, Richard H. Popkin, ed. (Cambridge, Ma.: Hackett Publishing Co. 1990/1998), esp. pp. 35-6 and 75. Originally published in 1779. [↑](#footnote-ref-8)
9. See Sharon Street, “A Darwinian Dilemma for Realist Theories of Value - 2005 - Philosophical Studies 127, no. 1 (2005): 109-166, and James Joyce, *The Evolution of Morality* (Cambridge, MA.: Bradford Books/MIT Press, 2005). [↑](#footnote-ref-9)
10. Copan, *op. cit.*, p. 88. [↑](#footnote-ref-10)
11. Linville, *op. cit.,* p. 395. [↑](#footnote-ref-11)
12. Linville, *op. cit.*, p. 396. [↑](#footnote-ref-12)
13. Elliot Sober, *From a Biological Point of View*, (Cambridge: Cambridge University Press: 1994), 93-113. Quoted in Linville, *op. cit.*, 395. [↑](#footnote-ref-13)
14. For an explanation of arguments for modularity of various kinds, see Robbins, Philip, "Modularity of Mind", The Stanford Encyclopedia of Philosophy (Winter 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2017/entries/modularity-mind/> [↑](#footnote-ref-14)
15. John Mikhail, *Elements of Moral Cognition: Rawls’ Linguistic Analogy and the Cognitive Science of Moral and Legal Reasoning* (Cambridge: Cambridge University Press, 2011) [↑](#footnote-ref-15)
16. Roger White, “You Just Believe That Because…” [*Philosophical Perspectives*](https://philpapers.org/asearch.pl?pub=792) 24 (1):573-615 (2010) [↑](#footnote-ref-16)
17. Sharon Street, “A Darwinian Dilemma For Realist Theories Of Value”, *Philosophical Studies* 127 (2006), 109–66, 117. Cited in Linville, *op. cit.,* 396 as p. 13. Cited in White, *op. cit.*, p. 589. [↑](#footnote-ref-17)
18. White, *Ibid.* [↑](#footnote-ref-18)
19. See for example Alexander Rosenberg, “Morality: the Bad News,” Ch. 5 of *The Atheist’s Guide to Reality: Enjoying Life Without Illusions* (New York: Norton Publishers, 2012) and Michael Ruse,*The Darwinian Paradigm* (London: Routledge, 1989). [↑](#footnote-ref-19)
20. S. J. Gould & R. C. Lewontin, “The Spandrels of San Marco and the Panglossian Paradigm: a Critique of the Adaptationist Paradigm,” *Proceedings of the Royal Society (Biological Sciences)* September 21, 1979. DOI: 10.1098/rspb.1979.0086 [↑](#footnote-ref-20)
21. Linville, *op. cit.*, 397, quoting Charles Darwin, *The Descent of Man and Selection in Relation to Sex*, 2nd edn. (New York: D. Appleton & Co., 1882). [↑](#footnote-ref-21)
22. Linville, *op. cit.*, 397. [↑](#footnote-ref-22)
23. Copan, *op. cit.,* 88. [↑](#footnote-ref-23)
24. I discuss “nothing-but” arguments for Inadequacy in Antony, *op. cit.* [↑](#footnote-ref-24)
25. For a more detailed version of this story, see my “Thinking” in Brian McLaughlin, Ansgar Beckermann & Sven Walter (eds.), [*The Oxford Handbook of Philosophy of Mind*](https://philpapers.org/rec/MCLTOH). (Oxford: Oxford University Press, 2009) pp. 607-0. [↑](#footnote-ref-25)
26. Interestingly, there is evidence that our close primate cousins also are sensitive to fairness. See work by Sarah Brosnan, http://www2.gsu.edu/~wwwcbs/inequity.html [↑](#footnote-ref-26)