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Assessing the Damage: Moral Realism & the Evolutionary Debunking Argument

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Departmental Honors Thesis  
The University of Tennessee at Chattanooga  
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# 1. INTRODUCTION: A BRIEF HISTORY OF EVOLUTIONARY ETHICS

The theory of evolution explains that humans, like all life on planet Earth, are the products of millions of years of random genetic mutations and the pressures of natural selection. Consternation over the ethical implications of the theory of evolution is practically as old as Charles Darwin himself.<sup>1</sup> Religious contemporaries of Darwin presaged civil unrest to inevitably follow the laity's apperception of a natural origin of morality; some feared undermining beliefs in a divine source for moral laws would open a Pandora's Box of unmitigated debauchery, listlessness, and an insouciance for political order.<sup>2</sup> At the opposite end of the spectrum, there were those who embraced Social Darwinism, the position put forward most clearly not by Charles Darwin but a contemporary of his, Henry Spencer, that human ethics from henceforth should model the animal kingdom's modus operandi of survival-of-the-fittest.<sup>3</sup> Under this view, the highest moral good would be advancing the human species most swiftly. The allure sprung from the scientific authority to which proponents of Social Darwinism appealed.<sup>4</sup> This entailed limiting the birth rates of peoples or races deemed "inferior," the cessation of funding organizations established to help the sick and needy, and only allowing individuals of above average intellect, ability, and so forth to reproduce. This apparent ethical implication of the theory of evolution sparked the eugenics movement in Europe and America in the early twentieth

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<sup>1</sup> See Darwin, 1874.

<sup>2</sup> See Smith, 1898.

<sup>3</sup> See Rogers, 1972.

<sup>4</sup> See Dikötter, 1998.

century. It also greatly undergirded Hitler's antisemitism, Aryanism, and Nazi pedagogy under the Third Reich.<sup>5</sup>

However, justifying certain moral imperatives due to their derivation from Social Darwinism, a practice now relegated to a field called Prescriptive Evolutionary Ethics, waned substantially by the mid-twentieth century for a few reasons. First, Prescriptive Evolutionary Ethics is one of the most blatant offenders of the "is-ought" fallacy elucidated by philosopher David Hume in the eighteenth century. The "is-ought" fallacy is committed whenever a description of something is used as a justification for a moral imperative.<sup>6</sup> For example, to say that a child is starving is the reason as to why someone should give the child food is to confuse an "is" statement with an "ought" statement. The child *is* starving; someone *ought* to feed him. While such connections are made often enough, there is nothing in the first statement that necessarily produces the second. This is all that propels Prescriptive Evolutionary Ethics: if there *is* a "superior" race, its survival *ought* to be promoted over others; if the terminally ill *are* being kept alive by resources that healthier people could benefit from, the terminally ill *ought* to be allowed to die off, etc. Furthermore, it is quite clear that a society that tramples on its weak cannot prosper. There is a collective social interest in supporting those who cannot support themselves; children, for instance, require years of extensive care by their parents before they are self-reliant. Given the poor foundation upon which Social Darwinism rests, most ethicists shelved metaethical considerations surrounding the theory of evolution.<sup>7</sup> That is, until now.

Advances in the fields of neuroscience and evolutionary biology have redirected our attention to an evolutionary explanation for the moral sentiments that we possess. Ethicists are

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<sup>5</sup> See Weikart, 2013.

<sup>6</sup> See Hume, *Treatise of Human Nature*, 1739: Book 3, Part 1, Section 1, Paragraph 27.

<sup>7</sup> See Ruse, 1986.

now specifically interested in what kind of relationship to moral laws the products of evolutionary forces (such as ourselves) could possibly have. Put another way, the nature of their questions has shifted from evaluating *specific content within* moral systems to investigating any moral system's *metaphysical and/or epistemic* legitimacy. Faculties capable of moral judgement evolved, and all moral "facts" are known subjectively and exclusively through that evolved moral faculty. Therefore, if our capacity to pass moral (or, evaluative) judgements has been endowed to us by forces that favor survivability above all else, some ethicists conclude that the theory of evolution necessarily undermines any grounds for belief in moral realism. Moral realism, in a general sense, will mean that mind-independent, causally inert morals (whether natural or non-natural) exist, and that we can come to know at least some of these morals. The arguments sometimes are more metaphysical in nature, seeking to prove the implausibility of moral realism given the evolutionary history, but most focus on the epistemological consequence: that, regardless of the veracity of moral realism, it is difficult to explain how or why organisms would come to know mind-independent, causally inert moral properties. This is essentially the framework of the Evolutionary Debunking Argument (EDA), the topic of this thesis. That Darwin's theory presents insurmountable problems for moral realists is a position still maintained by many philosophers today, it being the upshot of Evolutionary Debunking Arguments.

Just as many people a century ago surmised, the theory of evolution may verily entail some ethical consequences, but with this insight elucidated by EDAs, its exhaustive implications could elicit a far more startling paradigm-shift than Darwin's contemporaries ever imagined. If no moral faculty can be trusted to be ordered towards objective truth due to its evolutionary origins, then we would have to move forward with the understanding that no moral system can

be known to be objectively true, correct, or universally binding. Moreover, strong arguments have been brought forward equating morals epistemically with mathematics, as we'll explore later in this paper. If EDAs necessitate a position of skepticism with regards to morals, it may equally entail a position of skepticism towards mathematics as well. With stakes as high as these, this subject warrants a careful investigation.

Important also to stipulate from the outset is that the EDA I seek to discuss is the one that begins from the premise that evolution is “fitness-tracking,” as opposed to primarily “truth-tracking.” Some such as Alvin Plantinga (a theistic moral non-naturalist) have argued that evolution could be “truth-tracking” because a divine design oriented our cognitive faculties to develop in a specific direction, i.e., towards knowing truth, so his EDA will not come under the same fire as the former one I mentioned.<sup>8</sup> I seek to address the EDA that is most often wielded by strict materialists, those who promote that we were not guided along in our evolution by preternatural or supernatural forces but that all results of natural selection were contingent on preexisting natural circumstances.

Here, then, will be the structure of this paper. First, I will trace the primary arguments proffered by Michael Ruse, Richard Joyce, and Sharon Street, whose contributions to this discussion have constituted, arguably, the most seminal works in favor of EDAs to date. Next, before the moral realist even needs to mount a response from their own camp, there are a few chinks in the EDA's armor that anyone, realist or not, can address before moving forward. This would be in properly understanding the epistemic limits of the EDA and demonstrating the EDA's intrinsic epistemic incoherence. I will then point out several metaphysical presumptions Ruse, Joyce, and Street make along the way in their arguments that extend the discussion of

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<sup>8</sup> See Plantinga, 1993.

EDAs' limitations. The next section will explore how the evolutionary challenge for moral realism is equally an evolutionary challenge to mathematical realism as well as the relation's significance to the Benacerraf-Field challenge. I'll then briefly touch upon a few plausible tracking theories before closing the paper with my final thoughts and conclusions.

## **2. THE HARBINGERS OF THE EDA**

### **2.1. MICHAEL RUSE**

Michael Ruse posits what is a primarily metaphysical problem for moral realists both in the naturalist and non-naturalist camps. He argues that evolutionary selective pressures offer a complete and sufficient explanation for the rise of moral systems such that any attempt to objectify moral phenomena would be redundant and unnecessary. Furthermore, whatever moral systems we devise or adhere to must accord with our nature, which is not a characteristic of an independently true, objective moral code, unless we concede that humans are the only moral beings and something beyond evolutionary pressures guided our emergence from the primordial soup. Until we accept that, he writes, the existence of any moral laws and their value to us (especially those that contradict our nature) must come into question.

#### **2.1.1. "EVOLUTIONARY ETHICS: A PHOENIX ARISEN" (1986)**

In his paper "Evolutionary Ethics: A Phoenix Arisen," Ruse explains that the modern evolutionist's position is that all ethics are illusory.<sup>9</sup> Evolutionists in Darwin's era mistakenly

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<sup>9</sup> See Ruse, 1986.

attempted to ground moral truth in the moral systems of our simian ancestors and those extant or more rudimentary analogues in the animal kingdom. The modern evolutionist denies that there exists any ground for moral truth, be it in the evolutionary origin story, theism, Platonism, non-naturalism, or any other such system. Ethics is illusory, Ruse contends, in that though human morality is purely subjective and rooted in psychology, we still believe that it is objective. We believe moral statements are true and binding, and this is what gives them more power than, say, emotions, which we don't believe to be objectively binding, he writes. Evolution produced humans and all their moral sentiments, despite whatever is believed about them.

Ruse answers the objection of why, if our system of ethics is not built upon truly objective moral facts, we are anything but selfish. He explains that there exists a sufficient biological basis for the evolution of altruism: kin selection and the expectation of reciprocal altruism. By kin selection, he means that there is a fitness advantage for genes that prefer giving special aid to close biological relatives over genes that regard family members with equal suspicion as strangers. Genes that are more inclined to aid family members equate to more of those genes, or its nearly identical offshoots, being propagated. Parents, for example, willing to take on the selfless task of years of child-rearing will propagate their genes far better than the parents who leave their helpless infants and children to fend for themselves, but they'll also do this better than individuals who dole out that same intensive care indiscriminately to anyone, relative or not. By reciprocal altruism, he means a social system not unlike "an insurance policy," wherein all contribute to the pool of good deeds and only make withdrawals when needed. This creates a moral obligation within the group to assist others; those who ignore this moral obligation will be punished or removed from the group. Thus, the social pressures of a group exercising reciprocal altruism give rise to an elementary moral system. Ruse candidly

admits that there isn't a great biological explanation for the modern moral sentiment that humans have an equal duty to all other humans, however. He conjectures that our technology has outpaced our evolution. The example he gives is that now, thanks to the internet, global industry, and so forth, he knows that there are starving children in Africa, and he can send them money for food. He asks if his moral obligation to help these starving children overseas is equal to helping his own children.

Having traced a rough genealogy of moral systems and explained how they've shaped our attitudes today, Ruse addresses the much grander metaethical issues the theory of evolution poses for philosophers. He begins by briefly outlining what he calls the perspective analogy. The perspective analogy states that just as other organs have evolved to be sensitive to objective, independently real phenomena in their surroundings, so too has the moral sense evolved to detect objective, independently real moral laws. take an apple, for example. Even though the eyes are products of evolutionary forces and the image of an apple is subjectively experienced by the viewer, most would not doubt the veridical existence of the apple in the environment. Some people then equate this subjective apperception by organs of the real apple to the subjective apperception by the moral sense of real moral laws; this is the perspective analogy.

To investigate this, Ruse imagines the existence of two universes, one with objective morals and one without. For example, one universe has a God instructing us to care for the sick, in the other, God isn't there or is indifferent to our attitude towards the sick. Either way, Ruse writes, humans would have evolved to naturally care for the sick; the principles of kin selection and reciprocal altruism give plenty of room for this biological predilection with or without objective ethics. He says that by this insight, an objective moral system would be "redundant." The assertion that only in a universe with objective morals would humans evolve to care for the

sick carries the assumption that forces beyond evolutionary pressures, i.e., something preternatural, was directing our evolution, an opinion with which scientists can do nothing. Given the premise that only the forces of natural selection guided our evolution, then the problem for moral realists gets even worse. That means we didn't evolve with these morals and customs because supra-scientific forces made it such that we had to; we are what we are, we have the morals that we have, by the contingencies of our circumstances. He gives the graphic example that, had we not evolved from primates in the savannah but from cave-dwelling termites, our system of ethics would more closely resemble that of the contingencies of a termite-like existence, including highly regarding the practice of eating each other's feces to ensure everyone has the necessary parasites for digestion as termites must to survive. Thus, he demonstrates that under the given premise, our ethics depend entirely on our biology.

Before closing his paper, Ruse addresses one famous philosophical effort of grounding objectivity in morals without appealing to anything external: Immanuel Kant's constructivist theories. Kant argued that morality arises whenever rational beings interact and subsists in those interactions. Kant, like the evolutionary biologist, also argued that acting morally is not only reasonable, but it also has greater binding power than preference, as a society that cannot function socially will not be a society for long. Yet the constructivist argument still depends on the contingent nature of the rational beings. Biologists hesitate to agree entirely with Kantian constructivism because it implies that human-centric morality is the superlative moral system for any rational creature. He briefly returns to the rational termite-humans to demonstrate that they could not perfectly adhere to human-centric morality as their biology necessitates engaging in behaviors that we would call repugnant or even hazardous. If there would be a dispensation to engage in those behaviors to avoid suicide, then the constructivist must concede that morality

must mold itself to some degree according to the rational being's nature. Thus, Ruse concludes, there is no separating human nature from morality, as the former determines the latter.

## 2.2. RICHARD JOYCE

Richard Joyce carves out a path for moral fictionalism. He contends that, regardless of whether moral properties exist or not, there is an impossibly wide gap between those truths and our ability to ever know them, given our fitness-focused evolutionary history. Essentially, he argues that we can never have epistemic certainty that our moral beliefs are justifiable. There is still yet a utility in forming certain moral beliefs over others, though, so first-order moralizing need not be halted.

### 2.2.1. *THE EVOLUTION OF MORALITY* (2006)

In Chapter Six, “The Evolutionary Debunking of Morality,” of his book *The Evolution of Morality*, Joyce presents his seminal analogy of belief pills to expose the epistemological threat the evolutionary origin story poses to moral realists.<sup>10</sup> To begin, he imagines a world wherein taking a certain pill confers a certain belief. One pill will make you believe Napoleon Bonaparte won the Battle of Waterloo in 1814, and the other will make you believe he didn't, and that upon taking either one, you will forget that you took any pill and that such pills exist. Joyce imagines you took the pill that made you believe Napoleon lost that battle, you forget you took it, and you carry on living your life believing Napoleon lost (as he did). Say a cure to the amnesic effects of the pills hits the market, and you suddenly remember that you took the Napoleon-loses pill.

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<sup>10</sup> See Joyce, 2006: Chapter 6.

Because you formed your belief of Napoleon's failure in 1814 from a blind process (as opposed to, say, studying the history), the veracity of the content of your belief must come into question. Until you acquired the requisite historical evidence to know that the content of that belief is correct, your belief that Napoleon lost Waterloo is unjustified, as this belief was acquired in a way that had no connection to the content itself but was randomly selected. In entirely the same way, Joyce contends, because our moral beliefs are the products of a blind and random evolutionary process, our moral beliefs are unjustified.

Drawing explicitly from an earlier argument by Gilbert Harman,<sup>11</sup> Joyce poses an epistemological problem for moral realists. Because the forces of evolution have up until now shaped all our moral beliefs, we must investigate the content of all our moral beliefs, and not just whether we've made the right call on specific issues (euthanasia good, abortion bad, for example), but whether any moral right or wrong can be known to exist and, more importantly, known by us. Essentially, even if mind-independent moral truths existed, he contends that because we evolved by a fitness-focused process, we cannot ever hope to have true, indubitable knowledge of those truths. He argues that not only is the pill scenario a fair analogy, but that it continues to hold today.

Joyce argues that the moral conundrum is unique. The fact that evolutionary pressures shaped our mathematic sense, for instance, does not similarly undermine our mathematical beliefs. He gives the example of two people on the savannah.<sup>12</sup> There would have been a fitness advantage conferred to individuals who believed that  $1 \text{ lion} + 1 \text{ lion} = 2 \text{ lions}$  as opposed to individuals who believed  $1 \text{ lion} + 1 \text{ lion} = 0 \text{ lions}$ , as the one without the capacity for basic arithmetic would have been eaten. Evolutionary pressures would have selected for that

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<sup>11</sup> See Harman, 1977: Chapter 1.

<sup>12</sup> This discussion of his will be referred to several times later in this paper. It takes place on pp. 182-190.

rudimentary mathematical capacity only if it corresponded to veridical, external, mathematical realities. The known universe cannot be conceived such that the mathematical belief  $1 + 1 = 2$  is false. Joyce explains that the same cannot be said of moral beliefs. He writes that undoubtedly, forming conclusions about rightness and wrongness on the savannah would've conferred greater fitness advantages for the survival of a social group than a group of individuals operating selfishly and entirely independent of others' needs; importantly, however, he says that those primitive beliefs about goodness and badness could conceivably be formed without appealing to external, immutable principles of goodness and badness. Unlike mathematics, wherein the fitness advantage in believing  $1 + 1 = 2$  only makes sense if it is externally true, whether external moral properties existed in the time of our primitive ancestors has no bearing on the evolutionary genealogy of morality. That is to say, social creatures such as ourselves would've either had to appeal to external moral truths or make them up in order to survive.

Joyce also counters that the evolutionary debunking of morality does not therefore debunk all human reasoning. The capacity for arithmetic, as well as any other faculties we use in pursuit of science, only have an intelligible evolutionary genealogy if these faculties to some extent made correct judgements about phenomena in the surrounding environment. Morality is yet different, in that there would have been a necessity to formulate rules of behavior to facilitate social cooperation and survival of the group regardless of whether there existed any external moral truths to detect and by such things so correct these primitive normative moral systems.

Whereas Ruse thinks appealing to the existence of real moral properties is a redundant explanation to the evolutionary origin story, easily excised by Occam's Razor, Joyce creates room for the nuance that there is a possibility that moral facts, if they can be reduced to non-moral facts, could have a role to play in the evolutionary moral story. However, he is not

optimistic that the caliber of naturalistic reduction that global naturalists would need to see for the existence of moral facts will come about anytime soon. Joyce contends that until the moral naturalist can provide a seriously plausible reductive account of moral facts, a prospect he finds unlikely, the evolutionary origin of our moral beliefs will continue to undermine all justification for those beliefs. He encourages others to not hold their breath for moral realists to meet this challenge.

Joyce notes that if moral facts can be reduced even to simply preexisting items requisite for the evolutionary explanation of morality, then the premise that evolution undermines all content of moral beliefs fails. Joyce spends the remainder of the chapter demonstrating the challenge of establishing moral naturalism. A system of moral naturalism, Joyce argues, necessarily carries with it a practical clout, meaning that it is both inescapable and carries an indelible authority. He then subdivides moral naturalists into two camps: one that claims practical clout can be explained naturalistically, and one that denies the necessity of practical clout in a moral framework. Either way, Joyce concludes, the naturalists' arguments are shaky at best and indefensible at worst.

The former group often mistakes finding a reason to perform or forebear against an action as finding practical clout in the natural world. The former group, too, will often equate morality to another property, such as happiness, claiming that whatever is moral is whatever maximizes happiness, as the utilitarians do. Other times they'll merely assert that morality is whatever a person has a genuine reason to do, claiming that this is the naturalization of morality so long as the reason is brought about by whatever is defined as proper consideration and decision-making. This is the idea behind "practical reasoning theory," that one can know if an act is wrong such

that if the agent were to correctly apply their reason, they would forebear from that act.<sup>13</sup> He raises the issue of reasoning often being slanted by an individual's idiosyncratic desires. Furthermore, if ever there was room to ask why one's reason elicited a given conclusion to do X, it tacitly admits that some people's reasoning is epistemically superior to others, and conclusions based on proper reasoning still retain room for debate, undermining practical reasoning theory, Joyce argues. The most prominent attempts have come from "self-conception strategies."<sup>14</sup> Joyce essentially finds these to be little more than games of semantics; simply declaring that behaving immorally damages one's human identity or robs an individual of certain degree of autonomy carries no authoritative weight, he explains. If anything, self-conception strategies are exercises in emotional rhetoric that bring little to nothing to the table of establish moral naturalism.

Joyce concludes that moral naturalists are in trouble if it is accepted that any moral system is incoherent if it does not carry that practical clout of undeniable authority and inescapability, as even the naturalists who argue moral proscriptions are the fruits of reason fall short of providing true practical clout. He sees the only alternatives to be either still yet jettisoning the requirement for a moral system to intrinsically carry practical clout (rendering ourselves, effectively, non-cognitivists), or to turn to the non-naturalists for an account of real moral properties. He illustrates that moral judgements can then therefore be explained by a non-moral genealogy (evolution by natural selection), non-natural moral facts, and/or supernatural moral facts, and a quick slash from Occam's Razor leaves us with the first proposition alone. Joyce ends the discussion with a concession that though knowing a truth-independent process shaped the content of our moral beliefs, those judgements are rendered unjustified, that doesn't mean all those beliefs are untrue. Returning to the pill analogy at the beginning of the chapter, if

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<sup>13</sup> See Harman, 1986.

<sup>14</sup> See Copp, 2004.

you learn that your belief in the fact that Napoleon lost Waterloo was imparted to you by having randomly taken one of two belief pills, a process that in no way relates to verifying its veracity, your belief would be rendered unjustified if still yet true. Joyce thinks the evolutionary genealogy undermines epistemic certainty in the content of our moral judgements in the same manner.

## 2.3. SHARON STREET

Sharon Street is responsible for articulating what she calls the Darwinian Dilemma. In this section, I will review the major arguments from both “A Darwinian Dilemma for Realist Theories of Value” and “Reply to Copp: Naturalism, Normativity, and the Varieties of Realism Worth Worrying About” as both papers are often referenced by those responding to her. Like Ruse, she puts forth a primarily metaphysical challenge to all types of moral realism.

### 2.3.1. “A DARWINIAN DILEMMA FOR REALIST THEORIES OF VALUE” (2006)

In this paper, Street begins with the following correction: our primitive ancestors did not first develop the capacity to form evaluative (i.e., moral) judgements, then exercise that faculty to decide which behaviors to engage in, which to forebear against; first, inarticulate, vague motivations and tendencies would’ve appeared, and those which would’ve been possible to inherit and provided a fitness advantage equal to or greater than the status quo would’ve survived.<sup>15</sup> By the time the capacity for language and sophisticated cogitation came to the scene,

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<sup>15</sup> See Street, 2006.

basic behaviors such as caring for the helpless young, helping members of your group, etc., that promoted survival would have already been selected for to some extent in the population.

Consequently, the exact content of our evaluative judgements only shares, at best, an indirect relationship to the influences of natural selection. By this she means while natural selection didn't necessarily bequeath judgements as exacting as "euthanasia is good, federal death sentences are bad," for instance, it would've imparted to our ancestors more basic tendencies, as she calls them, like those mentioned earlier: helping the young and sick, trusting those who trust you, and so forth.

The crux of the Darwinian Dilemma is that moral realists must either claim a relation exists between the selective pressures that shaped our moral beliefs and the mind-independent moral facts that they posit exist (and describe the nature of such a relation), or they must deny any such relation exists at all.

If there is no link between the forces of natural selection that shaped our basic moral beliefs and evaluative truths, then the moral realist in this instance must concede that natural selection is an off-track process. In this case, we'd likely only ever arrive at the evaluative truths that by sheer coincidence also enhance our fitness, if any such exist, and more than likely overlook evaluative truths that don't carry an intrinsic fitness advantage. Some continue to argue that despite no inherent link existing between the forces of natural selection and these moral facts, being creatures of reason, we can reflect and analyze our actions. We are not unthinking machines, the retort goes. The problem with this line of thinking, Street answers, is that we'd be making evaluative judgements based on previously established evaluative judgements or from some frame-of-reference moral system that was built by an off-track process. Essentially, we'd

be trying to correct error from more error. Either way, most of our evaluative judgements, if not all of them, would most likely be false.

The other option for the moral realist is to assert that some relation exists between evolutionary pressures and evaluative truths. Street posits that this route is the more plausible, as people already believe their evaluative judgements are true, and it is more likely that if we have true evaluative judgements, we did not arrive at them by mere chance.

Many moral realists will assert that the relation is obvious: evolutionary pressures selected for an improving ability to track evaluative truths. Street calls this the tracking account. These moral realists argue that it would've been advantageous for our primitive ancestors to accurately track these moral truths and to think and behave in light of them. Taking care of children is good, helping the sick is good, and those ancestors who grasped truths such as these better would've had a fitness advantage over others who couldn't grasp these truths as well. She notes that the tracking account presents itself as a scientific explanation for the evaluative judgements we possess, but this is not to the tracking account's advantage. Street presents an alternate scientific explanation that she calls the adaptive link account. By this account, primitive ancestors that clung to the evaluative judgements that tended to promote reproduction or enhance survivability are the ones that survived. She equates this development to some extent to the development of other fitness-promoting reflexes. Though contemplation plays a role in the formation of evaluative judgements, like reflexes, evaluative judgements arose because they allowed the organism to respond to the environment in a way that betters its chances of survival.

To illustrate the differences between the tracking account and the adaptive link account, she explains the origin of widespread evaluative judgements (performing an action that will help keep the organism alive, helping kin, etc.) from the perspective of both. They both explain that

these judgements came about because holding to them would have benefited the survivability of the individual in question to some degree. The tracking account explains that the reason for this is because these evaluative judgements are true, while the adaptive link account recognizes that such behaviors would've naturally enhanced survivability regardless of such judgements being labeled true or false.

Street advocates that the adaptive link account is far superior to the tracking account on three grounds: its parsimony, its clarity, and its explanatory power. As for its greater parsimony, the tracking account necessitates adding elements to the world, mind- and desire-independent evaluative truths, to provide a complete explanation, whereas the adaptive link account does not. As for its clarity, Street notes that simply apprehending something true isn't necessarily advantageous for one's survival. For example, while we can afford to expend energy and resources to development and maintain equipment that can detect electromagnetic waves, other species cannot, and so to apprehend the truth about electromagnetic waves not only wouldn't confer an evolutionary edge to these other species, it would actually be disadvantageous to attempt to apprehend the truth of these waves. Furthermore, if morality is real but non-natural as some claim,<sup>16</sup> such truths can't block a creature's path or provide sustenance, can't be pointed to; how learning about such intangible truths could provide a direct evolutionary advantage, Street cannot see. The moral naturalist is not in a much stronger position, she posits. Even if there is a reproductive advantage for perceiving evaluative facts, Street criticizes the vagueness of the nature of such facts, how they reduce or irreducibly overlay onto reality, and explains that the realist still cannot explain why the apperception of such facts would have directly enhanced survival. The word she uses for such a complex theory is "unattractive," because the adaptive-

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<sup>16</sup> See Shafer-Landau, 2003.

link can provide a self-contained and comprehensible explanation without appealing to such vagaries.<sup>17</sup>

Her final point is that the adaptive link account sheds greater light on the question at hand, why most people make the same, certain evaluative judgements over others, than the tracking account. The adaptive link account satisfactorily explains why we value our survival, why we care for our offspring, why we value human lives over plants' and animals' lives, and so on, and that is because such tendencies promoted the reproductive success of our ancestors. The tracking account merely explains that we hold these judgements because survival is good, caring for the young is good, it's right that we value fellow humans over other creatures, and the like. This doesn't offer real explanatory power, as it fails to explain why these judgements are good and correct. It just says they are.

Street also points out that the tracking account fails on three fronts. It cannot explain the remarkable coincidence that so many of what the realists posit to be evaluative truths coincide with the beliefs we would have formed if those beliefs had only been chosen for their fitness advantage alone. It also cannot explain why we also tend to make evaluative judgements that, after consideration, we may think are false, and yet have held very deeply, for example, drawing a discriminatory line between the "in-group" and an "out-group." The adaptive link account explains that this tendency arose because it tended to promote survival, while the tracking theory cannot give us a satisfactory answer as to why we tended to make false evaluative judgements (as most would agree that discriminating against people outside your group is wrong). Lastly, Street notes, only the adaptive link account can explain why judgements like "pufferfish are more important than people," "we should scream at purple objects," and other seemingly absurd

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<sup>17</sup> See Street, 2006: p. 131.

statements have no place in our moral landscape: to hold such judgements would not have promoted survival. The realist could only insist that we don't hold these and any other absurd judgements one could dream up simply because they're false, which would not only be redundant but unhelpful in providing an explanatory account for making such judgements.

Street concludes that the realist is left with two options at this point: he must either still accept the tracking theory despite the objections raised here, or that no relation exists, neither of which Street can assent to. She asserts that the only logical position in light of our evolutionary origin story is that of the moral antirealist.

### 2.3.2. "REPLY TO COPP: NATURALISM, NORMATIVITY, AND THE VARIETIES OF REALISM WORTH WORRYING ABOUT" (2006)

In her paper, "Reply to Copp: Naturalism, Normativity, and the Varieties of Realism Worth Worrying About," after briefly recapitulating the arguments from the former paper, Street addresses the shortcomings of David Copp's quasi-tracking thesis, the notion that evolutionary forces bequeathed us with the ability to track moral facts to an epistemically sufficient degree.<sup>18</sup> While Street continues to argue that the tracking account is unscientific, there is nothing intrinsically unscientific about this tracking thesis. It is problematic, however, as it still cannot explain why a relation between evolutionary pressures and independent moral truths exists in the first place. An internalist reading of Copp fails to elicit a satisfactory explanation as to why evolutionary pressures would have favored tracking independent truth facts; an externalist reading, that is, that we have no obligation to adhere to the dictates of morality, only explains the

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<sup>18</sup> See Street, 2008; Copp, 2008: pp. 194-196.

moral facts without equipping them with any authoritative power over us, and such moral realism is not the target of Street's Darwinian Dilemma.

Before closing this paper, she gives an outline of the requirements of a naturalist account of morality such that it adheres to uncompromising normative realism: (1) the natural-normative identity is correct regardless of personal evaluative attitudes, (2) it cannot be fixed by actual attitudes, and (3) it must be a version of moral internalism, i.e., it must carry a binding power to behave morally. If it does not meet all three of these requirements, Street continues, normative realism cannot be said to vindicate morality. Street is inclined to believe that no one holds a naturalist realism that satisfies all three of the above requirements. The turn would then be to non-naturalism, but the Darwinian Dilemma poses a problem for non-naturalist realism, as well.<sup>19</sup> Ultimately, Street maintains the position that the Darwinian Dilemma demonstrates that all moral injunctions, all value to be found in the world, only exist because we've decided they do.

### **3. LIMITATIONS OF THE EDA**

#### **3.1. GUY KAHANE'S STRUCTURE FOR THE EDA**

Ruse, Joyce, and Street maintain that moral realism is redundant given the evolutionary origin story, inferior to antirealist explanations for the reason we possess the evaluative judgements that we do, and untenable given the fitness-first focus of natural selection. Neither moral naturalism nor moral non-naturalism seem safe from its blows. The argument they've set

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<sup>19</sup> For more on how this challenge equally threatens non-natural moral realism, see Section 4.2.

up is now known as the Evolutionary Debunking Argument. How should the moral realist proceed?

Before progressing, the final structure of the EDA needs to be clearly stipulated.<sup>20</sup> In his paper, “Evolutionary Debunking Arguments,” Guy Kahane does just that. First, he outlines the following structure for a General Debunking Argument:

*Causal premise.* S’s belief that p is explained by X.  
*Epistemic premise.* X is an off-track process.  
 Therefore  
 S’s belief that p is unjustified.<sup>21</sup>

The structure of the EDA, then, is as follows:

*Causal premise.* S’s belief that p can be explained by our evolutionary history.  
*Epistemic premise.* Evolution is not a truth-tracking process with respect to evaluative truths.  
 Therefore  
 S is not justified in believing p.<sup>22</sup>

The scope of debunking arguments is limited to undermining the reason for believing p, but it can’t go so far as to definitively say that p is false. Specifically, it won’t show that having an evaluative attitude is unjustified, only that believing an evaluative attitude is justified is itself unjustified. Here, then, is the epistemic outer limit of the EDA: it cannot be used to undermine moral realism in a metaphysical sense, or, in other words, to disprove the existence of and/or influence of real moral properties on the formation of our moral beliefs, but it has the potential to dismantle our justifications for the moral beliefs we have formed thus far.

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<sup>20</sup> The evolutionary debunking argument has many variations, each with specific wording that may entail or exclude certain conclusions from one another. I picked Kahane’s because his clearly demonstrates the scope of the argument in terms of its local vs. global debunking power, which is necessary to understand to the point of epistemic incoherency.

<sup>21</sup> See Kahane, 2011: p. 106.

<sup>22</sup> Ibid, p. 111.

### 3.2. SELF-DEFEATING?

The question must immediately be raised as to whether the EDA as construed is self-defeating. If the crux of the argument is that evolutionary influences, which aren't truth-tracking with respect to evaluative truth due to evolution's fitness-first focus, being responsible for the moral beliefs we have formed, render moral beliefs unjustified, why should it be the case that evolutionary influences are trusted to be truth-tracking for any other form of judgement, including scientific, mathematic, sensorial, and philosophical, such as those judgements which lead us to believe in the veracity of the EDA's conclusion, when not truth but survival is still its primary aim? If the debunking power of the EDA can undermine epistemic certainty in evaluative judgements, it should therefore cause us to bring into question epistemic certainty for all types of judgements, unless proponents of the EDA are prepared to say that moral judgements are uniquely obfuscated by evolutionary influences.<sup>23</sup>

Kahane, I think, correctly decides that there are only three possible outcomes when wielding an EDA. The first option is to say that EDAs undermine no evaluative beliefs at all, and the second is that EDAs undermine all evaluative beliefs. This is because the question of internal coherency must be raised with respect to the epistemic premise. The final option is that only some evaluative beliefs are undermined by EDAs, which most of its proponents (including Ruse, Joyce, and Street) assume or argue. This final option, however, is the most chimerical. Kahane isn't convinced that the epistemic premise can be stopped before leading to global skepticism. In fact, he concludes that local EDAs have no place in serious debates concerning normative ethics.

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<sup>23</sup> This would not make much sense, of course, as *all* judgements are so far understood to be produced by the brain, itself a product of billions of years of evolutionary pressures and influences. If moral judgements are uniquely obfuscated by such pressures, then they must be the only beliefs formed by the brain (and our beliefs about everything else, including science, math, history, and so forth, by some immaterial rational faculty immune to evolutionary pressures), a conclusion with which I don't imagine any proponent of the EDA would agree.

Driving this point home, a recent paper by Christophe de Ray explains how a scientific realist must then concede that his justification for believing in the veracity of the theory of evolution is unjustified, given the theory of evolution:

Recall, 'scientific realism' here refers to the view that our best scientific theories accurately represent mind-independent states of affairs. Now, insofar as evolutionary theory figures among our best scientific theories (which it surely does), it follows that scientific realists are compelled, by virtue of being scientific realists, to believe in evolutionary theory. But if [believing evolutionary theory ought to make us distrust our innate metaphysical intuitions] is true, this means that scientific realists, by virtue of being scientific realists, ought to distrust innate metaphysical intuitions—including, crucially, the innate metaphysical intuition that facts generally have explanations for their obtaining. . . .if being a scientific realist compels us to believe a theory such that, if we believe it, we ought to distrust our innate metaphysical intuitions, including those intuitions that one must rely on in order to believe scientific realism, then scientific realism is a self-undermining position.<sup>24</sup>

It seems to follow that if evolution is a fitness-tracking process rather than truth-tracking, this should cause consternation for all justifications rather than solely justifications for moral sentiments. The materialist is forced, then, if they say that the content of moral judgements cannot be trusted to be true with respect to moral truths due to the obfuscating influence of evolutionary pressures, to likewise say that the content of any other beliefs we form with respect to scientific truth, mathematical truth, historical truth, and so forth, must also come under scrutiny, given that they, too, were formed by an evolution-addled brain. If we cannot trust the conclusion that we should not murder the neighbor's cat simply because such a belief was formed by the brain, then, too, should we doubt that we ever saw a real cat in the neighbor's yard, as that belief was also formed by the brain: this is the ultimate implication of the EDA as construed, taken to its logical conclusion.

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<sup>24</sup> See de Ray, 2020: pp. 10, 18.

### 3.3. EPISTEMIC INCOHERENCE

The would-be debunkers, ultimately, believe that EDAs carry a threatening challenge to the moral realists because they make a distinction between moral and nonmoral belief content. In doing so, they actually ground their argument on epistemological concerns surrounding moral properties rather than any concerns arising from the evolutionary account. Das explains, “[Pertaining] to the *debunking force* of EDAs—specifically...their force derives primarily from metaphysical assumptions about the nature of morality or the (im)possibility of moral truth, rather than from epistemological doubts associated with our evolutionary history.”<sup>25</sup> At the heart of the matter is not an evolutionary challenge: if it were, it would be immediately self-defeating, as shown in the previous section.<sup>26</sup> The issue, then, is something more fundamentally metaethical in nature. Before explicating the metaethical issue they’re decrying, the following subsection will expose the metaethical underpinnings of their Darwinian arguments.

#### 3.3.1. THE ROOT OF RUSE’S CLAIMS

Ruse makes the rather hasty presumption that an objective moral system would provide a redundant explanation for the moral sentiments we possess. He writes:

Imagine two worlds, identical except that one has an objective ethics (whatever that might mean) and one does not. Perhaps, in one world God wants us to look after the sick, and in the other He could not care less what we do. The evolutionist argues that, in both situations, we would have evolved in such a way as to think that, morally, we ought to care for the sick. To suppose otherwise, to suppose that only the world of objective ethics has us caring about the sick, is to suppose that there are extrascientific forces at work, directing and guiding the course of evolution. And this is a supposition which is an anathema to the modern biologist...<sup>27</sup>

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<sup>25</sup> See Das, 2016: p. 419.

<sup>26</sup> See Section 3.2.

<sup>27</sup> See Ruse, 1986: p. 107.

Ruse presumes that a universe in which there are objective morals and a universe without such morals are otherwise identical. Given that we have a sample space of exactly one universe and that we are as of yet unsure to which category ours belongs, this is a precarious presumption to make. It could be the case that, if the universe we occupy does contain somehow within it, whether as natural or nonnatural entities, objective moral laws, then a universe without such laws, and perhaps too our moral beliefs, would appear vastly different. Ruse can't unequivocally espouse that the process of natural selection would've been unaffected by this change when he himself admits that he doesn't understand what moral laws are nor how they would affect us. His tone carries the same petulance as the callow physicist who proclaims, "I don't know what string theory is, but given a universe wherein string theory is true and a universe wherein it is not, humans in those two universes would have evolved in the exact same manner regardless."<sup>28</sup> Erik J. Wielenberg assesses, "Assuming...that nihilism is false in the actual world and that the moral supervenes on the nonmoral, the nearest [world that Ruse describes here] is impossible."<sup>29</sup> If morals exist and are a natural phenomenon, then it would be contradictory to say that a world with and a world without a given natural phenomenon would be indistinguishable from one another, for one lacks some real natural thing that the other possesses. If morals are real but nonnatural, and if they in any way impress on the natural world, then that impression, whatever form that may take, would similarly make the world impressed by nonnatural morals distinguishable from the world that lacks nonnatural morals and those conspicuous

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<sup>28</sup> This is not to fault him, of course, for not knowing what is meant by objective ethics nor what the properties of moral laws are. To point this out, as well, is not done under the presumption, either, that someone else or anyone knows exactly what moral laws are, given that they are still only propositions as far as is understood. I mean only to say that this is too bold a claim given his lack of understanding of objective ethics.

<sup>29</sup> See Wielenberg, 2010: p. 456.

impressions.<sup>30</sup> Ruse's position depends on the unwarranted belief that a universe lacking objective ethics is identical to the one that lacks them not, and this is an unwarranted belief because he does not know the nature of "objective ethics (whatever that might mean)."<sup>31</sup>

Ruse, of the three, is the most willing to contend with the possibility that the evolutionary origin story could undermine epistemic certainty across the board. In fact, he does admit in his book, *Darwinism and its Discontents*, that our beliefs are just as tenably formed in other regards as they are regarding morals:

...the Darwinian assumes simply that the rules of mathematics and logic; the basic beliefs about causality and the like; the epistemic values or principles, are not simply cultural ephemera that were invented by people ... but are at some level ingrained in our biology....One thinks mathematically because one is biologically disposed to do so, and one is attracted to simple and elegant theories for the same reason. Why should this be so? [B]ecause those of our would-be ancestors who thought mathematically and logically and preferred the simple to the complex tended to survive and reproduce, and those that did not, did not.<sup>32</sup>

Ramon Das provides another quote from Ruse to contrast with the above to demonstrate this discrepancy and commentary:

[W]hen Ruse turns to ethics, he draws a very different conclusion: the Darwinian ethicist should "take a radically different approach and...deny that there are any foundations [to ethics] at all! The Darwinian's answer to the question of justification is that ethics—substantive ethics, that is—has no justification."<sup>33</sup>

In short, in both cases—Darwinian epistemology and ethics alike—Ruse appears to concede to his anti-realist opponent that a robustly realist metaphysical position is implausible, given our evolutionary history. However, in the former case he thinks this is no big deal: metaphysical reality is nothing to us, and since we cannot use it, we should dismiss it. In the latter case, however, the impossibility of maintaining a robust realism is a big deal: ethics is not real! It has no foundation!<sup>34</sup>

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<sup>30</sup> Sharon Street briefly discusses the difficulty in maintaining the position of a moral nonnatural realist in the first horn of her Darwinian Dilemma (Street, 2006: 121-125). This person has to deny that a relation exists between moral truths and the moral beliefs we've formed, claiming ultimately then that evolution by natural selection selects for moral beliefs independently from those truths, differing from the moral skeptics and antirealists in only that they additionally aver the existence of nonnatural moral laws.

<sup>31</sup> See the block quote from Ruse on Page 24.

<sup>32</sup> See Ruse, 2006: pp. 242-243.

<sup>33</sup> See Ruse, 2006: p. 255.

<sup>34</sup> See Das, 2016: p. 430.

Ramon Das points out that Ruse makes several metaphysical assumptions. First, he assumes there would be no difference in a world with and a world without morals. Secondly, he assumes that evolution is not progressive in relation to moral progress as it is (assumed to be) progressive in other domains, such as science and mathematics. Finally, he recognizes that though it's possible that in some way, evolution may have selected for moral beliefs by "drawing [them]" in reference to something external, he does not care to explore this possibility, believing no reductive account for morals in the natural world can be made. Therefore, Das seems right to conclude that his arguments rest on shaky metaphysical foundations.

### 3.3.2. RESPONDING TO JOYCE

Joyce balances his argument on top of several metaphysical presumptions about the nature of morality as well. He concludes:

Harman's challenge...is that hypothesis A [the nonmoral genealogical account from the theory of evolution] promises to explain all of our moral judgements, leaving us without need to posit any moral facts (i.e., with no reason to assume that any of our moral judgements are true) unless the moral facts are somehow implicitly buried in hypothesis A. The only way that moral facts could be implicitly buried in a scientific genealogical hypothesis is if some kind of moral naturalism were true...[but] the previous two sections have cast doubt on this possibility...[now] Ockham's Razor really can come in and do its thing, for non-naturalism and supernaturalism do posit extra ontology in the world, but the presence of the non-moral genealogy (hypothesis A) shows this ontology to be explanatorily superfluous. Hypotheses B and C [non-naturalism and supernaturalism, respectively] can be excised.<sup>35</sup>

This carries with it a version of the same presumption Ruse made, namely, presuming that human moral sentiments would have evolved in the exact same manner in both the presence and absence of moral facts, entities which remain inscrutable to the speaker. Given that Joyce is forced to explore various iterations of realist positions (naturalism, non-naturalism, supernaturalism, etc.), this presumption is, at root, nonsensical, because by even contending with competing versions of the realist position, it's evident that he himself does not know what a

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<sup>35</sup> See Joyce, 2006: pp. 209-210.

moral fact is and therefore cannot reasonably assert that moral facts have no noticeable effect on the evolutionary development of moral beliefs.

Most critically, in my opinion, he makes a rather arbitrary distinction between the reason certain mathematical judgements are trustworthy and the reason moral judgements are not.<sup>36</sup> It is by this distinction that Joyce asserts that we ought to only be skeptical about the content of our moral beliefs but not to the content of our other beliefs, such as those regarding science or mathematics. Anticipating this rebuttal, recall that Joyce attempts to draw a distinction between the domains of math, science, and morals<sup>37</sup> but his distinction rests upon largely undefended metaphysical claims, as Ramon Das explains. Das writes:

When it comes to reducing the moral to the non-moral, however, Joyce sets the bar considerably higher. Despite his claim that he is interested only in the broad sense of reduction, it is clear that when it comes to the moral case he thinks "having a story to tell" is not going to be enough for the moral naturalist to make her case. ... It is in Joyce's assessment of *this* proposal that the key metaphysical claims behind his debunking argument against the moral naturalist come to the fore.

These metaphysical claims are mainly two... the first is about the nature of moral values; the second, about the possibility of reducing such values to naturalistic facts. Specifically, the first claim holds that moral values are inescapably authoritative.... And Joyce's second metaphysical claim is simple: given the nature of moral values just articulated, there are no moral values.

... Without the metaphysical claim that there are no moral values, there is a gap in the argument against the possibility of reducing the moral to the non-moral. And without the latter argument there is a gap in any epistemological debunking argument that tells against the moral naturalist. ... the apparently epistemological character of EDAs obscures key metaphysical claims about the nature of morality or moral truth on which the debunkers' arguments crucially depend.<sup>38</sup>

Responding to Joyce on the same point on epistemic incoherence, William FitzPatrick notes:

At a formal level, we employ the same logical and analytic abilities in moral reasoning as in other forms of reasoning. And in terms of conceptual content, moral reflection and reasoning is continuous with broader evaluative and normative thinking that our cognitive capacities were plausibly designed to do accurately.<sup>39</sup>

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<sup>36</sup> The ability to distinguish math and morality epistemically will be explored in great depth in Section 4.

<sup>37</sup> See Joyce, 2006: pp. 182-190.

<sup>38</sup> See Das, 2016: pp. 423-424. Emphasis his.

<sup>39</sup> See FitzPatrick, 2015: p. 888.

For Joyce to divide the faculties by which moral judgements are formed from the rest of the mind's faculties<sup>40</sup> is indefensible given this continuity. The argument for their epistemic dichotomy will be explicated in greater detail in later sections.<sup>41</sup> For now, let it simply be noted that this is ultimately an untenable distinction and cannot be used to undermine justifications for moral beliefs without shaking the epistemic justifications for the whole swath of human beliefs.<sup>42</sup>

### 3.3.3. STREET'S "A-DARWINIAN" DILEMMA

Eleonora Severini and Fabio Sterpetti, addressing Street's reluctance to embrace global antirealism as quickly as she embraces moral antirealism, write:

In other words, Street embraces an EDA [evolutionary debunking argument] for morality and an EA [evolutionary argument] for other domains, e.g. scientific beliefs, common sense beliefs or beliefs based on perceptions. In so doing, Street's position is epistemically incoherent. Indeed, it could be claimed that once we have accepted an evolutionary account of the epistemic justification of our beliefs, then it is epistemically incoherent to support antirealism in one domain and realism in other domains. The problem, critics say, is that if one goes evolutionary, it is difficult to contain 'the corrosive acid' of Darwinism to a specific set of beliefs.... In other words, if nothing can be justified because evolutionary influences prevent us from justifying any claim, then it is surely not only moral realism that is in trouble.<sup>43</sup>

They show that Street wants to have her cake and eat it too: she thinks she can use the evolutionary origin story to say that all moral beliefs are unjustified, using scientific beliefs formed by the same brain formed by the same evolutionary pressures she now argues obfuscated her moral reasoning faculties.

Recall, too, that Street argues for an adaptive link account (ALA) over a tracking account (TA). A paper by Marc Artiga<sup>44</sup> breaks down the weaknesses in her three reasons for doing so: parsimony, clarity, and explanatory power.

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<sup>40</sup> Again, see Joyce, 2006: pp. 182-190 for his discussion on their separation.

<sup>41</sup> See Section 4.

<sup>42</sup> See Section 3.2.

<sup>43</sup> See Severini & Sterpetti, 2017: p. 8.

<sup>44</sup> See Artiga, 2015.

First, she argues that the ALA is more parsimonious than the TA because the TA “obviously posits something extra that the [ALA] does not, namely independent evaluative truths.”<sup>45</sup> Like Ruse, she presumes that a universe without objective morals is indistinguishable from a universe with them. Unlike the previous debunkers, this point doesn’t only stand if the above statement is true. In her Darwinian Dilemma, it is presumed for the sake of argument that moral realism is true. Moral realism posits both that morals exist and that we can come to know the existence of at least some of them. Given, then, in this construction that moral realism is presumed true, the ALA does not posit anything ontologically superfluous, and thus, Occam’s Razor deems ALA and TA to have commensurate ontological volume and so can do no slashing. Furthermore, no additional evidence is being presented to the moral realist, essentially: it is rather obvious that one case presents the possibility of moral facts, and the other does not. Just because one is lacking in moral facts does not provide evidence that indeed, there are, more than likely, no moral facts, as Street suggests.<sup>46</sup> Valuing ontological parsimony threatens to eviscerate the correct explanation. The ALA is only better/more parsimonious than TA if it is indeed the case that moral facts do not exist or had no influence over how moral beliefs were formed, which is not known.

Secondly, she points out the difficulty in explaining how an organism could benefit from accurately representing causally inert, mind-independent moral facts. Essentially, her argument rests on the assumption that no one has yet provided a noteworthy explanation as to how moral facts can be figured into causal explanations. Given that this subject has a substantial body of literature surrounding it, it’s a large and unstable presumption, Artiga writes.<sup>47</sup> Furthermore, this

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<sup>45</sup> See Street, 2006: p. 129.

<sup>46</sup> See Artiga, 2015: pp. 3363-3364.

<sup>47</sup> See Artiga, 2015: p. 3366.

gives it a temporary dimension as well: as soon as a proper account surfaces, this point loses all force.

The last point, the point of explanatory power, is what he considers her strongest. To address this, he points out, however, that the ALA and the TA need not come into conflict together. He makes this argument by citing teleosemantics:

Teleosemantics claims that the existence of a representational mechanism requires a sender (which often enough must represent truly) and a receiver (which often enough must lead to fitness-enhancing behavior). Both the truth of the representation and the adaptiveness of the ensuing behavior explain why a representational mechanism exists at all. Thus, TA and [ALA] should not be considered alternative accounts, but complementary explanations.<sup>48</sup>

This, of course, follows only if moral realism is actually true, but it could take part in a fuller response from a moral realist such that Street's point of explanatory power falls flat. This rebuttal will address Street's other objections to the TA, such as why the TA forms suspiciously remarkable coincidences between truths and reproductive advantage, why we do not hold all possible moral judgements, and why we make (presumably) false judgements on occasion, such as prioritizing the well-being of only in-group members.

Recall that Street assumes moral realism to be true for the sake of her argument. Importantly, however, moral realism, as she understands it, has two premises: the first is that moral laws exist, and that at least some of those laws are knowable. Therefore, Klenk points out that at the very least, "[t]his would be enough to reject the claim that empirical evidence about the origins of our beliefs gives us sufficient reason to doubt the truth of *all* of our moral beliefs."<sup>49</sup> However, the crucial thing is that Street's argument rests upon the force of the Benacerraf-Field Challenge and not really a Darwinian dilemma. In brief, the Benacerraf-Field Challenge questions our ability to ever obtain proper knowledge of mind-independent, causally

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<sup>48</sup> Ibid, p. 3370.

<sup>49</sup> See Klenk, 2017: p. 785.

inert properties.<sup>50</sup> As shown earlier, when EDAs revolve around an empirical premise, the argument immediately becomes self-defeating.<sup>51</sup> Therefore, a robust evolutionary argument against moral realism fails.<sup>52</sup> However, Street's arguments retain veritable power against moral realism in that it ultimately relies on the more stable Benacerraf-Field challenge, with "the reference to empirical, Darwinian considerations...reduced to an illustrative veneer that is ultimately redundant to reaching the argument's conclusion."<sup>53</sup>

### 3.3. THEN THE PROBLEM ISN'T DARWINIAN

Kahane warns, "If you cite an off track causal influence on an interlocutor's belief that p in order to increase support for your view that not-p, you should, at the minimum, first rule out that your own belief was shaped by this or a similar influence."<sup>54</sup> The moment the evolutionary history is cited as a reason to distrust the content of our moral beliefs, immediately the content of all beliefs must come under scrutiny. This would also include the content of beliefs about first-order logic, including those which buttress the epistemic premise of the EDA. Therefore, if evolution is as distorting as is purported, then EDAs are self-defeating. It can therefore be reasoned that, because EDAs are self-defeating, they pose no true threat to moral realism.<sup>55</sup>

This is not to say that moral realism is in the clear, so to speak. Formidable charges have been levied against the position of moral realism that still need addressing from an evolutionary perspective. Specifically, the question becomes twofold. First, how could we come to know the

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<sup>50</sup> The Benacerraf-Field Challenge will be expounded upon in greater detail in Section 4.2.

<sup>51</sup> See Section 3.2.

<sup>52</sup> See Klenk, 2017: p. 794.

<sup>53</sup> Ibid.

<sup>54</sup> See Kahane, 2011: p. 113.

<sup>55</sup> Again, this applies to the EDA directed towards materialists. This may not be the case for an EDA constructed by a theistic moral non-naturalist.

existence of mind-independent, causally inert entities like moral properties? Secondly, why should we think evolutionary pressures selected for accurate mental representation of these properties?

## **4. MATH AND MORALS: EPISTEMIC EQUIVALENTS?**

Before exploring the question of whether or not we can ever have proper knowledge of mind-independent, causally inert properties like morals, let us also consider another set of (arguably, proposed) abstract entities which this definition includes: mathematics. What will follow is an argument delineated by Justin Clarke-Doane for the epistemic implications for mathematics when challenging moral knowledge on evolutionary grounds.

### **4.1 JUSTIN CLARKE-DOANE**

Justin Clarke-Doane will show that the traditional (i.e., axiomatic) system of mathematics is epistemically equivalent to any axiomatic system of morality and therefore subject to a tantamount Darwinian debunking. He later tries to rescue moral realism specifically from these consternations, especially with respect to the Benacerraf-Field Challenge, but, I'll argue, is not successful. If anything, by drawing attention to these epistemic relations, he helps dig a deeper hole for moral realists.

#### **4.1.1. "MORALITY AND MATHEMATICS: THE EVOLUTIONARY CHALLENGE"**

(2012)

In his paper, “Morality and Mathematics: The Evolutionary Challenge,” Clarke-Doane puts forth the argument that one cannot simultaneously hold the position of mathematical realism and moral antirealism.<sup>56</sup> First, he clarifies the target of the evolutionary challenge to moral realism or the evolutionary challenge to mathematical realism. It is “the view that there is a mind-language-independent array of truths of the relevant sort to which our corresponding discourse answers when interpreted literally.”<sup>57</sup> Specifically, when discussing topic D, D-realism is the conjunction of four schemata.

[D-TRUTH-APTNESS]: Typical D-sentences are truth-apt.<sup>58</sup>

When D means morality, this blocks A. J. Ayer’s emotivism, the position that ethical statements are mere expressions of feelings toward given behaviors. When D refers to mathematics, this blocks David Hilbert’s formalism which states that nonfinitary mathematical propositions are used to make moves in a game.

[D-TRUTH]: Some atomic or existentially quantified D-sentences are true.<sup>59</sup>

This excludes J. L. Mackie’s error theory for morality and Hartry Field’s fictionalism for mathematics. Both theories purport that the subject matter of their discourse (objective moral laws and abstract mathematical objects, respectively) does not exist, so all statements made about them are ultimately false.

[D-INDEPENDENCE]: The truth values of D-sentences are relevantly independent of minds and languages.<sup>60</sup>

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<sup>56</sup> See Clarke-Doane, 2012.

<sup>57</sup> Ibid, p. 315.

<sup>58</sup> Ibid.

<sup>59</sup> Ibid, p. 316.

<sup>60</sup> Ibid.

This schema blocks Christine Korsgaard's constructivism when taken to mean that morals are constituted by the reasoning of rational agents, and it blocks L. E. J. Brouwer's intuitionism when taken to mean mathematical truths depend on the ability of the mind to derive its truth.

[D-LITERALNESS]: D-sentences should be interpreted literally.<sup>61</sup>

This schema disallows for reinterpretations of D-discourse to be true. In the case of morality, this blocks Harman's relativism such which has for a given moral sentence *s*, according to a moral framework *M*, *s*.<sup>62</sup> It also blocks any mathematical theories in which mathematical discourse is, as a whole, misleading.<sup>63</sup> Clarke-Doane explains that this grounds D-sentences in a position of neutrality; D-sentences are not conditional upon the framework or theory from which D-discourse emanates. The conjunction of these four schemas is D-realism, and its proponents D-realists. When D refers to morality, the conjunction is moral realism, the target of the evolutionary debunking argument for moral realism. Similarly, when D refers to mathematics, the conjunction is mathematical realism, the target of the evolutionary challenge for mathematical realism. He also defines evolutionary explanations versus trivial explanations. Evolutionary explanations are those which explain our having many true D-beliefs because natural selection favored those who had true D-beliefs. Trivial explanations are those which explain our having many true D-beliefs by the hypothesis that it is inconceivable to imagine the D-truths being any different.

Targets now clearly elucidated, Clarke-Doane recapitulates the two driving points of the evolutionary debunking arguments. The first is that our moral beliefs and/or the cognitive faculties responsible for the formation of those beliefs are products of an evolutionary process.

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<sup>61</sup> Ibid, p. 317.

<sup>62</sup> Paraphrasing from Harman & Thompson, 1996.

<sup>63</sup> See Chihara, 1990; Hellman, 1989.

More generally, “we were selected to have cognitive mechanisms that entail dispositions to form certain primitive belief-like representations in certain environments.”<sup>64</sup> The second is that given that evolution is a non-truth-tracking process with respect to moral beliefs, we were not selected to form true moral beliefs or have the cognitive faculties capable of reliably forming belief-like representations of the state of moral affairs. Nodding back to Street’s Darwinian Dilemma, the resulting conundrum for moral realists is in explaining how a “non-truth-tracking” process could give rise to us having formed so many true moral beliefs (as most moral realists would assert that we have) without citing an astronomical coincidence.

It establishes two things. First, the moral realist may not rely upon the explanation that we were selected to have true moral beliefs (or cognitive capacities to form reliable representations of moral phenomena). We may have been selected to have some moral beliefs/cognitive dispositions inclining us towards certain representations, but not that such beliefs and representations were necessarily true. The second upshot is that the moral realist cannot explain our having many true beliefs by citing the impossibility of imagining vastly different moral truths as true.

A difference is often delineated between the importance of forming true mathematical beliefs for survival and the importance of forming useful (but not necessarily true) moral beliefs for survival.<sup>65</sup> By this, it is meant that had the moral truths been entirely different, our moral beliefs would’ve been the same, as the moral beliefs selected for were those that best promoted survival. The same cannot be said, it is argued, for mathematical beliefs. For example, if a moral truth stipulated that killing offspring was good, Clarke-Doane writes, humans would have still evolved to believe that killing offspring was bad, as those who did were more likely to have

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<sup>64</sup> See Clarke-Doane, 2012: p. 318.

<sup>65</sup> Again, see Joyce, 2006: pp. 182-190; Sinnott-Armstrong, 2007.

surviving progeny to propagate the genes that engender that moral predisposition. Essentially, we can conceive of moral truths being entirely different and still presume that we would have evolved to form the beliefs we have now. In the case of math, though—it is nearly inconceivable to imagine  $1+1$  equaling anything but 2, but for the sake of argument—if mathematical truths were such that  $1+1$  truly equaled 0, the survival of our ancestors would have largely depended on their capacity to recognize and apply that truth in their environment.

Joyce is among the ranks of those who explicitly hold this position, as may be recalled from earlier in this paper. Joyce is the one who makes the analogy to the ancestors on the savannah learning the life-and-death consequences of correctly mathematically accounting for the total number of lions in their surroundings.<sup>66</sup> However, his analogy does not prove what he intends, Clarke-Doane explains. Rather than demonstrate the unique necessity of forming true mathematical beliefs, his example demonstrates that in order to provide an evolutionary explanation for the contents of our mathematical beliefs, we must presuppose those contents. Taken further, it appears that we must, in the pursuit of evolutionary explanations for the content of D-beliefs, assume the contents of those D-beliefs despite not being selected to form true D-beliefs to arrive at that explanation. Clarke-Doane points out that we must presume the contents of our beliefs concerning elementary logic, for example, when deriving an evolutionary explanation for those elementary logic beliefs.

He goes on to explain that for every mathematical belief H we are selected to possess, there is a corresponding, nonmathematical truth which makes the advantage for believing H plausible. He clarifies that a nonmathematical truth means a truth that doesn't imply a substantive mathematical sentence as understood by the previously stipulated schemas.

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<sup>66</sup> Again, see Joyce, 2006: pp. 182-190.

Whenever H corresponds to a basic arithmetic belief (such as  $1 + 1 = 2$ ), the relevant nonmathematical truth is often a first-order logical truth corresponding to elements in the environment. When H corresponds to a geometrical proposition, however, its relevant truths will be a little more complicated but yet still concern the nature of the environment. Here, Clarke-Doane discusses as an example the geometrical proposition that the shortest distance between two points is a straight line, SD. He writes:

What matters, as in the case of elementary arithmetic, is how such creatures' mathematical beliefs "line up with" truths about their environments. If the physical world appropriately aligns with their mathematical beliefs, it does not matter whether the mathematical world does too. If our ancestors who believed SD had an advantage over our ancestors who believed alternatives to it, the intuitive reason that they did is that a corresponding hypothesis about the structure of our environments was true.

I conclude that the argument that we would not be selected to have true moral beliefs shows equally that we would not be selected to have true mathematical beliefs. Creatures with mathematical beliefs roughly like ours would have been more successful at passing on their genes than creatures with very different mathematical beliefs even if the mathematical truths were very different.<sup>67</sup>

He does sidestep the question of whether we were selected to have true mathematical beliefs. His aim here is only to show here that those ancestors who believed that  $1 + 1 = 2$  would've had a greater chance of survival over those who believed  $1 + 1 = 0$  because there is a corresponding first-order logical truth that corresponds to the former equation and not the latter.

Clarke-Doane anticipates the response that it is not possible to conceive mathematical truths being very different (as he presumed prior to this point), but that it is conceivable to imagine moral truths being very different, and thus, the epistemic analogy does not hold. It is the case that, given that moral disagreements have been hedged for millennia, if the realist can give an account for our having many true moral beliefs, it cannot be by a trivial explanation.

Clarke-Doane clarifies that there are two types of proof: logical proof, and justificatory proof. The former shows that a conjecture follows from given axioms. A logical proof cannot

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<sup>67</sup> See Clarke-Doane, 2012; p. 332.

prove that the conjectures are true whenever the axioms are themselves in doubt. The axioms are taken to be true for the sake of the proof, but the axioms are not proved true by it. In a justificatory proof, a conjecture is shown to be true, given that the axioms are not in doubt. Now, if the language of morality could be regimented in a formal manner and some moral statements assigned as axioms, Clarke-Doane explains that morality would enjoy a commensurate consensus regarding moral conclusions, given that what follows from axioms simply then depends on the rules of logic.<sup>68</sup> The next question is whether the conjectures of mathematics have been proved in a justificatory sense. There have been numerous debates concerning mathematical axioms at all levels of the field, from the (seemingly) most rudimentary arithmetic principles to the most abstruse principles of set theory. He cites John Bell and Geoffrey Hellman:

Contrary to the popular (mis)conception of mathematics as a cut-and-dried body of universally agreed upon truths...as soon as one examines the foundations of mathematics [the question of what axioms are true] one encounters divergences of viewpoint...that can easily remind one of religious, schismatic controversy.<sup>69 70</sup>

This is not to say that elementary claims in mathematics, such as  $1 + 1 = 2$ , are false, given that any substantive mathematical truths exist at all. Disagreements of the sort he, Bell, and Hellman are referring to do not turn on whether there are any substantive mathematical truths, but rather, assuming those truths exist, what their exact nature is. In the same vein, Clarke-Doane notes that he knows of no philosopher who assents to the existence of substantive moral truths and simultaneously denies rudimentary moral claims, such as one shouldn't torture children for one's amusement.

Bringing it all together, he explains:

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<sup>68</sup> As to why morality is behind the ball here as opposed to mathematics, Leibniz writes, "If geometry were as much opposed to our passions and present interest as is ethics, we would contest it and violate it but little less not withstanding all the demonstrations of Euclid and Archimedes," (*New Essays on Human Understanding*, Book II, Chapter ii, §12, paragraph 2).

<sup>69</sup> See Clarke-Doane, 2012; p. 336.

<sup>70</sup> He is rewording a quote from Bell & Hellman: 2006, p. 64.

Nevertheless, it is worth repeating that to say that it is intelligible to imagine that, say,  $1 + 1 = 0$ , realistically construed, is not to say that it is intelligible to imagine that a marble on the table and a marble on the floor make no marbles in all. Again, the latter claim is a (first-order) logical truth (or, perhaps, an impure set-theoretic or mereological truth). To say that it is intelligible to imagine that  $1 + 1 = 0$  is to say that it is intelligible to imagine that the number 1 bears the plus relation to itself and to 0—or, more exactly, in the present context, that it is intelligible to imagine that, given that there are substantive mathematical truths at all, the number 1 bears the plus relation to itself and to 0. Arguably, the latter claim is at least suggested by the existence of disagreement among apparently conceptually competent people—people who concede that there are (substantive) mathematical truths—over such fundamentals of arithmetic as that every natural number has a successor.

I conclude that the (non-question-begging) argument that it is intelligible to imagine the moral truths being very different shows equally that it is intelligible to imagine the mathematical truths being very different.<sup>71</sup>

Separating the mathematical claim from the logical, he makes apparent that a trivial explanation for the mathematical beliefs we've formed is just as untenable as a trivial explanation for the moral beliefs we've formed. Thus, he shows that the evolutionary challenge for moral realism is equally a challenge for mathematical realism<sup>72</sup> in light of two reasons: one, the argument that we were not selected to have true moral beliefs shows equally that we were not selected to have true mathematical beliefs, since we can imagine the mathematical truths being highly different; and two, that the non-question-begging argument that it's possible to imagine the moral truths being highly different can also demonstrate that it's possible to imagine the mathematical truths being highly different, as well. There are several upshots to all of this, but I'll focus on two. One is that the evolutionary challenge doesn't mean the moral realist can't use any explanation in the accounting for our having many true moral beliefs, merely that he or she can't use an evolutionary or trivial explanation.<sup>73</sup> Secondly, there seem to be no epistemological grounds upon which one can simultaneously be a mathematical realist and a moral antirealist. This is not to say the epistemological argument for the moral realist has been defused; rather, it seems that

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<sup>71</sup> See Clarke-Doane, 2012: p. 338.

<sup>72</sup> When both begin axiomatically.

<sup>73</sup> If the system of morals is constructed like mathematics (i.e., beginning from unprovable axioms), that is.

this should equally destabilize our justifications for having true mathematical beliefs when either type of belief is the conclusion of an axiomatic system.

## 4.2. GÖDEL & THE BENACERRAF-FIELD CHALLENGE

Clarke-Doane's conclusions in the prior sections follow naturally from the conclusions of Gödel's incompleteness theorems. The first theorem demonstrates that for any strong, formal system  $S$ , it is possible to find a consistent extension of  $S$ ,  $T$ , that would bring forth a false sentence. Therefore, though  $S$  can be shown to be consistent,  $S$  cannot be shown to be true from within  $S$ . This holds for any system of math or morals that begins from a priori axioms; math cannot prove math to be true, nor morals of morality's veracity. Gödel's second theorem of incompleteness demonstrated that for any axiomatic system  $T$ , a statement expressing  $T$ 's consistency is undemonstrable from within  $T$ .<sup>74</sup> Math or morals detached from their corresponding first- or second- order logical principles (as with the case of the marbles<sup>75</sup>) cannot be shown by their axioms nor logical proofs to be consistent. Clarke-Doane is doubtful, then, that Harman's argument that mathematical beliefs are more warranted than moral beliefs still stands. This concern arises not only by light of the epistemological arguments he presents, but also due to new arguments in the philosophy of mathematics he briefly touches upon that follow Gödel's theorems. He gives the example that mathematics, realistically construed, have recently been shown to be superfluous to our empirical scientific theories: if the mathematics that undergirds

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<sup>74</sup> See Sterpetti, 2019: pp. 229, 241.

<sup>75</sup> Refer to the quote from Clarke-Doane on page 40.

those theories were reconstrued into antirealist terms, the theories would still stand, and “all apparent talk of numbers, sets, and tensors and so on is redundant anyway.”<sup>76 77</sup>

Despite these objections, most mathematicians (and, paradoxically, proponents of the EDA) maintain that the conclusions of mathematics are, in Clarke-Doane’s justificatory sense, certainly proved.<sup>78</sup> To be consistent, if, for the sake of argument, the first axioms for morality were agreed upon and from those logical proofs were derived, they would have to say these moral conclusions are equally proved in the justificatory sense as their mathematics. The fact of the matter is, though, that neither seem justifiably believed.

What follows is the essence of the Benacerraf-Field Challenge. This challenge, in brief, comes first from an objection in mathematical philosophy raised by Paul Benacerraf. He postulates:

I find [mathematical realism] both encouraging and troubling. What troubles me is that without an account of how the [intuitive mathematical] axioms “force themselves upon us as being true,”<sup>79</sup> the analogy with sense perception and physical science is without much content. For what is missing is...an account of the link between our cognitive faculties and the objects known. In physical science we have at least a start on such an account, and it is causal...[S]omething must be said to bridge the chasm, created by...[a] realistic...interpretation of mathematical propositions, between the entities that form the subject matter of mathematics and the human knower.<sup>80</sup>

He articulates a trouble that naturally arises from the conclusions of Gödel’s incompleteness theorems: his concern is that there remains a disturbing noetic gap between our minds and the conclusions of axiomatic systems, or, more specifically, these mind-independent, causally inert

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<sup>76</sup> See Clarke-Doane, 2012: p. 339.

<sup>77</sup> Note, too, that this can pose a problem for moral realists, particularly the moral naturalists. If moral properties can be reduced to natural elements in the environment that play a causal role in that environment’s emergence, it can be said that a moral explanation of those emergent phenomena, then, would be redundant to the preexisting naturalistic explanation. See Street’s point on ontological parsimony in Section 2.3.1. We will investigate later if by positing that the existence of morals provides a better explanation for the contents of our beliefs than evolution, psychology, or sociology, whether this point of ontological parsimony loses its punch. See Section 5 for this discussion.

<sup>78</sup> Again, see Joyce, 2006: pp. 182-190; Cellucci, 2017: Sec. 20.12

<sup>79</sup> Citing Gödel, 1947: 1990, p. 268.

<sup>80</sup> See Benacerraf, 1973: pp. 674-675.

mathematical properties. To illustrate this point, Clarke-Doane gives the example “2 is a prime number,” writing, “...whatever the literal relations of causation, it does not seem that mathematical objects or properties could participate in them,” or that “*the number 2, the property of being prime, 2’s being prime, or the fact that 2 is prime*, could cause anything. These remarks make it hard to see how we could know that 2 is prime.”<sup>81</sup> A couple decades later, Hartry Field turned this observation into a direct challenge against mathematical realism. Field notes:

We grant...that there may be positive reasons for believing in [mathematical] entities...[T]he challenge...is to...explain how our beliefs about these remote entities can so well reflect the facts about them...[I]f it appears in principle impossible to explain this, then that tends to undermine the belief in mathematical entities, *despite* whatever reason we might have for believing in them.<sup>82</sup>

Field takes Benacerraf’s more casual observation and turns it into a direct challenge against mathematical realists, asking how material beings can come into intellectual contact with immaterial things like mathematical entities. Thus, we have the Benacerraf-Challenge:

*Benacerraf-Field Challenge:* It appears in principle impossible to explain our reliability with respect to truths that are *both* about causally inert objects and that predicate causally inert properties.<sup>83</sup>

The Benacerraf-Field Challenge, raised both to mathematical realists and moral realists alike, makes the assertion that no reliable account can be given as to how flesh-and-blood beings can know with certainty mind-independent, causally inert objects nor their causally inert properties.

This is where I think Clarke-Doane misses the mark. He tries to defuse the Benacerraf-Field’s attack on moral realism by arguing that mathematical truths only describe mathematical objects’ mathematical properties, while moral truths describe nonmoral objects’ moral

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<sup>81</sup> See Clarke-Doane, 2011: pp. 86-87.

<sup>82</sup> See Field, 1988: pp. 25-26.

<sup>83</sup> See Clarke-Doane, 2011: p. 89.

properties. If this holds, then it would be the case that moral truths are not *both* about causally inert objects and their causally inert properties like mathematics. Instead, moral truths would be about causally active objects that predicate causally inert properties. If so, then moral truths sidestep the Benacerraf-Field Challenge. To illustrate his point, he refers to his example of “two is a prime number.” “2” is an abstract mathematical object, and the property of being “prime” can only be applied to certain mathematical objects (i.e., numbers). Moral principles, on the other hand, describe moral properties of nonmoral objects, such as “people, actions, and events,” eliciting statements such as, “Hitler’s actions were evil,” or “liberating America’s slaves was good,” he writes.<sup>84</sup>

The problem is that moral truths don’t have to only ever describe nonmoral objects, nor do mathematical truths need to only describe mathematical objects. For example, we can say that “this group of people has the mathematical property of being four entities,” or that “justice is a higher moral good than clemency.” Therefore, mathematical truths and moral truths alike seem subject to the Benacerraf-Field Challenge, despite Clarke-Doane’s conclusion in his dissertation.

Notice that Street’s Darwinian Dilemma essentially asks the same questions: how can products of evolution such as ourselves have formed accurate and reliable beliefs about causally inert objects and the causally inert properties they predicate? Even if knowledge of such entities and properties were possible, why would natural selection have favored detection of their existence? Notice, too, that this challenge poses a danger for both the naturalists and the non-naturalists. The naturalists, who aver that morals are substantiated in the natural world, cannot seem to explain how evolution would have favored the detection of their properties that play no causal role in that natural world. The non-naturalists must account for how natural beings can

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<sup>84</sup> Ibid.

come to knowledge of non-natural entities as well as their causally inert properties. The question remains, then, if knowledge of mind-independent, causally inert moral properties is even possible for us. The remainder of this thesis will not seek to provide a thoroughly satisfactory answer to this question but merely outline possible strategies the moral realist could use in the development of an answer. I'll present a few accounts that attempt to disarm the Benacerraf-Field evolutionary challenge to moral realism.

## 5. HOW CAN WE TRACK MORAL TRUTHS?

### 5.1. ADDRESSING THE EPISTEMOLOGICAL CHALLENGE

The first question is whether we have the capacity to know the existence of mind-independent, causally inert properties at all. I will briefly discuss the epistemological strategies of moral realists Wielenberg, Enoch, and others.

Wielenberg sketches a modest account of how we could come to knowledge of such morals.<sup>85</sup> Specifically, he notes that across cultures, humans have developed (or, perhaps, recognized) the notion that we all have certain moral barriers, whether they are called personal rights, duties, or legitimate desires.<sup>86</sup> Certainly, as Joyce notes in Chapter 4 of *Evolution of Morality*, there would have been a survivability advantage to this notion, given that such a notion facilitates social cohesion.<sup>87</sup> Wielenberg considers two possible proximate methods by which we could have come to know these moral barriers: by intuition, or by emotion; his model accounts for a wide variety of such possible proximation methods, though. The bottom line is that in the

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<sup>85</sup> See Wielenberg, 2010.

<sup>86</sup> Ibid, p. 445.

<sup>87</sup> See Joyce, 2006: Chapter 4.

presence of certain cognitive capacities, beliefs of moral barriers arise. He thereby establishes a causal connection to moral barriers and moral rights by saying that the presence of these cognitive faculties precipitates belief in those moral barriers. Presuming, too, that evolution produces reliable belief-forming processes and that those beliefs tend to be true,<sup>88</sup> then it's reasonable to expect that evolution would've formed mostly true, reliable moral beliefs, and if such beliefs are indeed produced by a reliable process, then those beliefs have warrant, he explains.<sup>89</sup> David Enoch proposes a similar but more general scheme in which A-facts and B-facts are united by citing a third factor, C, which is responsible for both: in this case, drawing our normative beliefs and normative truths together by recognizing that survival is good.<sup>90</sup>

The advantage is that both accounts appear to provide a workable foundation for showing the epistemic possibility in acquiring true knowledge about moral laws if they exist. Namely, seeing as how evolution naturally selects for those creatures that are increasingly better at adapting to veridical truths about their environments, if morals exist and somehow either constitute in part or supervene over the physical world (as the naturalists and non-naturalists would argue, respectively), then those creatures who could adapt to those truths would've likely seen a greater survivability advantage.

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<sup>88</sup> See Carruthers, 1992: p. 113 for this argument.

<sup>89</sup> There are a few shortcomings with this account specifically, however. The most critical, in my opinion, is that he takes a position not unlike Kantian constructivism, in that objective morals are contingent upon the existence of an agent of certain cognitive capacities. Unequivocally, he explains that “[s]uch faculties are responsible for the presence of moral rights in that the presence of the relevant faculties entails the presence of rights,” (2010: p. 450). In this sense, it could be said that Wielenberg-morals have a causal account but are therefore not mind-independent. If he intends to say that they are mind-independent, then he loses the argument that Wielenberg-morals have a causal explanation, namely those cognitive faculties. So either his morals are mind-independent, or they are causally inert, but not both. It is argued that both conditions are metaphysically necessary properties of realist morals. It seems, then, he has not provided the account the realists need to defuse the metaphysical side of the Darwinian Benacerraf-Field challenge, but it could aid on the epistemic side. Ideally, however, both sides would be covered by one and the same account.

<sup>90</sup> See Enoch, 2010: pp. 429-432.

There are a few drawbacks, too. Both accounts seem to require that morals remain completely causally inefficacious. Klenk notes, too, that by explaining the content of our moral beliefs without appealing to moral properties as is done here, Street's ALA still comes out superior on the point of ontological parsimony.<sup>91</sup> Therefore, rather than beginning by proposing the existence of a third-factor or requisite cognitive faculty to get moral realism off the ground epistemically, it seems wiser for the moral realist to first show that no evolutionary account is complete (or at the very least, sufficient) in its explanation of our moral beliefs without appealing to the existence of corresponding real moral laws, eliminating the concern that moral realism posits the existence of something ontologically superfluous.

Non-natural moral realists have also attempted to bridge the noetic gap between mortals and morals by saying that human beings have material bodies but immaterial intellects.<sup>92 93</sup> While this would assuage Field's concern, this seems to me a more difficult position to defend than an evolutionary account of the kind seen earlier in this thesis.

Having addressed a few epistemic strategies and concerns relevant to the moral realist, I'll turn now to how a moral realist may address the question of providing an ontological account of moral realism that can avoid a slash from Occam's Razor.

## 5.2 ADDRESSING THE ONTOLOGICAL CHALLENGE.

In his paper paralleling a conundrum within philosophy of mind to positing ethical realism, William J. FitzPatrick explains how an ontology accounting for ethical realism may fit

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<sup>91</sup> See Klenk, 2017: p. 784.

<sup>92</sup> See FitzPatrick, 2018; Rizzi, 2004.

<sup>93</sup> While I think it more difficult, I won't say that it is impossible. See Section 5.2 for how FitzPatrick has recently attempted to carve out a similar position.

squarely in a natural explanation for a value-laden world.<sup>94</sup> He points out that the individual who claims that phenomenal experiences cannot be reduced to functional states or explained without deflating such experiences already possesses a non-physical metaphysics of mind to allow for the existence of these phenomenal facts. There is a possibility that if non-physicalism best accounts for phenomenal facts in philosophy of mind, then ethical non-naturalism may best account for the apparent “obviousness” of the content of the moral beliefs we tend to hold. Though it could very well be the case that there exists an entirely naturalistic explanation for the phenomenon of consciousness, in which case, the analogy tumbles. However, FitzPatrick explains, that if phenomena of experience cannot be deflated, reduced to naturalistic terms, or accurately deemed illusory, then what may provide the best explanation for them is to posit a non-physical reality in which these phenomena subsist. However, scientific inquiry into these mental phenomena is still in progress and, for this reason, many believe that a natural explanation for consciousness is merely “on the way.” In ethics, however, the presumption behind the discussion for ethical or moral realism is that as much as is needed to know about the natural world to provide a sufficient explanation for our moral beliefs is already known.<sup>95</sup> Therefore, we have seen a rejection of morals as illusory or seen moral beliefs deflated or reduced to naturalistic (i.e., evolutionarily explicable) terms (as socially advantageous moves, an expression of desires, etc.). FitzPatrick, in effort to not distort ethical experiences as anything except as they present themselves to be, views the natural world as more ontologically replete than the scientific process alone can capture. Comparing the position of Non-Scientific Physicalism in philosophy of mind to Non-Scientific Naturalism, he concludes that this may be the most plausible explanation for ethical

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<sup>94</sup> See FitzPatrick, 2018.

<sup>95</sup> I think it's safe to say that this is the position of our three proponents of the EDA, Ruse, Joyce, and Street.

experiences. Anticipating rebuttal along the lines of citing something ontologically superfluous or too exotic, he writes:

To object that this is “spooky” is doubly misguided, just as in the case of consciousness: it assumes that we know so much about the world through scientific inquiry as to know that the default is that it should not contain value (or phenomenal experience), or that it is somehow highly unlikely that it should; and it assumes that such things are unlike anything we have run across in experience, as if we were positing flying horses.<sup>96</sup>

My greatest concern for this position is that it teeters dangerously on an appeal to ignorance.

While it may be the case that consciousness as well as ethical phenomena, the kind that we would shape our moral beliefs around, have no reducible explanations yet just as well constitute veridical elements of reality, it could also be the case that a chemical account of consciousness is on the horizon and that the evolutionary picture painted earlier in this thesis provides a complete, reducible account for ethical phenomena.

I foresee several challenges for the moral realist when the time comes to address this ontological issue. If the moral realist wants to provide a naturalistic account for morals, then they must do so in a way that survives being reduced to other natural phenomena such as in terms of physical, biochemical, psychological, or sociological laws such that the moral dimension is not rendered “redundant” (like mathematics<sup>97</sup>). If, however, they propose an ontology for morals that is non-naturalistic, their explanation must not be ontologically superfluous to the evolutionary accounts given earlier but superior in explanatory power than those. I am personally unsure of how to construct such a case, but I think if any such can be made, FitzPatrick is on the best path to do so.

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<sup>96</sup> See FitzPatrick, 2018: p. 545.

<sup>97</sup> See the quote from Clarke-Doane on pages 41-42.

## 6. CONCLUSIONS: MOVING FORWARD REALISTICALLY.

I have presented the arguments of Michael Ruse, Richard Joyce, and Sharon Street. I have delineated Guy Kahane's structure for the EDA and assessed its susceptibility to self-defeat. I have revealed the metaphysical presumptions underpinning and, therefore, undermining Ruse's, Joyce's, and Street's positions. I showed how Justin Clarke-Doane epistemically linked the EDA's attack on moral realism to mathematical realism, which aided in demonstrating the gravity of the Benacerraf-Field Challenge to moral realism. Finally, I presented some strategies moral realists may use against evolutionary concerns raised against their account.

I think the question remains as to how humans could ever have knowledge of abstract entities and their properties, if such entities exist at all. The hypothesis of an immaterial intellect intrigues me the most, given, too, the conjunction of the conundrum of consciousness from a naturalistic standpoint. However, this is also a rather metaphysically exotic position, and I think the most elegant account for the content of our moral beliefs is still in the hands of the evolutionary biologists. This is not by the merit of the EDA, however. The EDA's error of citing an off-track process to undermine justification in one set of beliefs is, frankly, too narrow. If the EDA is right, then the reliability for all our knowledge should come into question—though, one could argue based on that fact, that we should even question our desire to now question that judgement, too—and so an infinite regress of doubt is generated. No, I think the real challenge to moral realism comes not from the EDA but from the Benacerraf-Field Challenge in Darwinian disguise.

Here's what I'll say to the Benacerraf-Field Challenge. To whatever degree humans are capable of intaking veridical data about their environment, if morals constitute or contribute some unique, macrophysical dimension to that environment and a connection between such

entities and our minds is possible, then it is reasonable, I think, to suspect that we have, at the very least, increasingly gravitated towards a more accurate ability to descry the presence of such entities around us, as we have improved our other senses in respect to their corresponding macrophysical objects over the course of our evolutionary history. If morals exist and we can come to know them, then likely, we have become better acquainted with them and will continue to do so. However, for this to become a viable account, I charge the moral realists to bring forward an account of morals that is superior to those presented at the front end of this thesis. It must both (1) provide an epistemology of how beings like us can know entities like morals, and (2) provide an ontology that shows that the existence of morals is not superfluous to our scientific explanation but better encompasses and thereby explains the gambit of our ethical experiences. I remain open to the possibility that though the task is daunting, such an account is possible.

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