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# Evolutionary Ethics? Substantiators, Skeptics, and Moral Realism

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UNIVERSITY OF CALGARY

Evolutionary Ethics? Substantiators, Skeptics, and Moral Realism

by

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A THESIS

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## **Abstract**

Hardly a week passes without new findings emerging from evolutionary psychology regarding how our view of morality has been influenced by our biological evolution. Evolutionary ethics is a normative project built upon these scientific insights. Evolutionary ethicists fall into two groups: substantiators or skeptics. Substantiators believe moral ideas can now be scientifically proven. Skeptics believe there are no moral truths because morality is just a biological adaptation. I believe the project of evolutionary ethics is misconceived. I argue that both the substantiators and the skeptics fail to show the direct relevance of biology to ethics. Moral truths can be established. But biology cannot support nor undercut these truths. I present the doctrine of moral realism as embodying the proper process of ethical inquiry, and I defend moral realism from evolutionary psychology's skeptical conclusions. I determine that biology can indirectly inform ethics, but never guide it. The ethical realm is independent.

## Preface

Before introducing my argument, I must say a few quick words in order to distinguish mine from that of others in the relevant literature. The following thesis is a critique of evolutionary ethics. That said, my critique is at once both narrower and broader than it may at first seem. My critique is narrower than it may at first seem because, in critiquing (and ultimately dismissing) evolutionary ethics, I do not also mean to dismiss evolutionary psychology. In addressing evolutionary ethics as, in some important sense, separable from evolutionary psychology, I depart from the conventional strategy of criticizing evolutionary ethics. The conventional critique (rightly) sees evolutionary ethics as unsound, and as based on evolutionary psychology, but therefore (wrongly) assumes that dismissing evolutionary ethics also entails dismissing evolutionary psychology. In the following pages, I articulate why I see the projects of evolutionary ethics and evolutionary psychology as separable, and why I see my narrow critique as superior to the usual, broad dismissal of both projects. Evolutionary ethics is unsound, but evolutionary psychology is viable. My critique of evolutionary ethics, far from aiming to thereby discredit evolutionary psychology, aims to ensure that we do not throw out blooming babies with unwholesome bathwater. As such, I believe these broader critiques are mistaken.

My critique is broader than it may at first seem because, in critiquing (and ultimately dismissing) evolutionary ethics, I also mean to dismiss naturalistic ethics in general. Evolutionary ethics is just one particular form of naturalistic ethics, but my critique of it is meant to apply to all forms. All naturalistic approaches fail to appreciate what I present as the key insight of my critique: the independence of the ethical realm. That is, that all substantive ethical claims can only be supported (or undercut) by other substantive ethical claims. External (e.g. naturalistic, metaphysical, etc.) substantiation or skepticism is not possible. Unlike mine, many

critiques of evolutionary ethics aim to dismiss evolutionary ethics without also thereby dismissing other forms of naturalistic ethics. I believe these narrower critiques are mistaken.

Lastly, in perusing the relevant literature, I notice that advocates of opposing positions are often talking past each other, rather than talking to each other. I believe that this failure to communicate is due to the deeper failure to genuinely explore the other's position. That is, to begin from the other's premises, and follow the other's argument to its conclusions. Rather, opposing advocates begin from distinct premises, and proceed to reach distinct conclusions. In contrast, I am concerned with a genuine exploration of opposing views. To that end, in critiquing both the substantiators and the skeptics, I begin from their own premises, and follow the logic (or lack thereof) of their own arguments. In so doing, I ensure that the conclusions I reach, though distinct from theirs, are not reached at in virtue of my having started from distinct premises. In other words, my conclusions, properly understood, are also their conclusions. Unless, of course, I have made some mistake(s) along the way...

## **Acknowledgements**

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## List of Abbreviations

Symbol	Definition
EP	Evolutionary Psychology
R&M	Rottschaefer and Martinsen
DA	Discrimination Argument
MPA	Many Possibilities Argument
AA	Accidental Argument

## Epigraph

Descended from apes! My dear, let us hope that it is not true, but if it is, let us pray that it will not become generally known.

--Maria Sullivan, the Bishop of Worcester's wife. June, 1860 (Cited in *The Hare and the Tortoise*, by David P. Barash, 1986: 3)

## INTRODUCTION

### **The Question**

To what extent, if any, should the science of the biological origins of morality guide the study of ethics? This thesis aims to establish a framework for the relationship between the biological science of morality and theoretical ethical inquiry. As such, I must define both the biological science of morality and the study of ethics, as well as outline the ways in which each can (and cannot) communicate with the other.

### *Evolutionary Psychology*

I present the science of the biological origins of morality under the project of evolutionary psychology (EP). EP's attempt to understand man emerges from the natural sciences. EP aims to give an account of how natural selection can play a key role in explaining not only human anatomy and physiology, but also psychology and behavior (Ayala, 2010: 293). That is, human behavior can be understood in light of the pressures and processes of evolution, which have shaped the way we think, just as they have shaped the way we look. EP should not be seen as a rigid discipline, but as a looser project to understand human behavior from a biological and evolutionary perspective. This project includes anthropologists, biologists, ethologists, neuroscientists, linguists, primatologists, psychologists, philosophers, sociologists, and many more.

EP is a bridge from the natural sciences to the social sciences. These natural and social scientists can be lumped under the banner of EP due to a fundamental similarity: EP is an empirical project. EP is concerned with presenting descriptive statements and scientific

explanations about human behavior and the world. Of course, EP is interested in more than just human morality. But I only focus on EP's account of moral cognition. EP's account of morality shows what things we think are good and bad, and explains why we hold those beliefs. As a descriptive project, EP is not continually commenting on whether its facts about morality are good or bad, in a moral sense.

### *Ethics Proper*

I present the study of ethics as the normative inquiry into human purpose and social organization. Ethics proper is a value-laden project. Traditionally, ethics is concerned with providing an account of human values, and the relationship between such values and the good life and the good regime (Strauss, 1959). I defend a particular thread of this traditional approach. I present the doctrine of moral realism as the embodiment of ethics proper. Moral realism is concerned with establishing objective values to be pursued, and giving rational justifications for those choices. Ethics is not a monolithic enterprise. As such, my presentation of its orientation is far from uncontested, and will be defended at length below.

Of importance now, however, is that ethics proper does not aim to be simply descriptive, but, more importantly, prescriptive. That is, ethics supplies philosophical reasons for the adoption or rejection of certain behaviors. (There is a distinction between ethics, which is the study of how to live well, and morality, which is the study of how we must treat other people (Dworkin, 2012: 13). Ethics is the more capacious of the two, since treating others appropriately is only a part of living well. Thus, all moral claims are ethical claims, but not all ethical claims

are moral claims (Kramer 2009: 2). The importance of this distinction between ethics and morality will depend on the matter at hand, and I will draw attention to it accordingly.)\*

### **Reformulating the Question**

To what extent, if any, should the moral *ought* of ethics proper be based on the scientific *is* of EP? This reformulation brings the complexity of our question closer to the surface. A *prima facie* distinction has now been drawn between *is* and *ought*. *Is* statements aim to explain how things are. *Ought* statements aim to justify the way things should be. This tentative distinction cuts right to the centre of our question. I have introduced the possibility that EP and ethics operate on different levels of understanding. EP operates on the level of *explanation*, according to a descriptive logic of inquiry. Ethics proper operates on the level of *justification*, according to a prescriptive logic of inquiry.

This distinction between *is* and *ought* will guide our subsequent analysis of the relationship between EP and ethics.<sup>†</sup> Does the *is/ought* distinction exist? Do EP and ethics indeed operate on different levels of understanding? And if so, do EP's descriptive statements somehow affect the prescriptive statements of ethics? The question of EP's relationship to ethics hinges on the answers to these sub-questions.

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\* At times, insisting on the distinction between ethics and morality can be awkward, since it is completely overlooked by EP's normative project.

<sup>†</sup> I also call descriptive *is* statements facts, and prescriptive *ought* statements norms or values, unless otherwise stated.

## **EP's Descriptive and Normative Projects**

There are generally thought to be two ways in which EP can contribute to ethics. I call these two possibilities EP's descriptive project, and EP's normative project. EP's descriptive project contributes to ethics by presenting descriptive *is* statements about ethical and moral opinions. Within the descriptive realm, we ask, "What does EP tell us about why we hold the moral beliefs that we do?" EP then attempts to present scientifically coherent theories, supported by empirical evidence, of how the process of evolution has influenced the development of our moral sense. EP's descriptive project is not my primary concern.

EP's normative project contributes to ethics not only by presenting descriptive statements about beliefs, but also by commenting on the veracity of those beliefs. Within the normative realm, we ask, "What does EP tell us about which of our moral beliefs are true (or false) and why?" EP then attempts to do either one of two things. First, based on evolutionary principles, EP aims to show not only why most people think murder or incest to be wrong, but also why murder and incest are indeed wrong, and why people ought to think so. Or second, based on those same evolutionary principles, EP aims to show why ascribing an objective status to any ethical belief is misconceived. Both possibilities constitute much more ambitious, and therefore dubious, objectives for EP. EP's normative project is my core concern.

### *EP's Double-pronged Normative Project*

It is possible to endorse EP's descriptive project, while rejecting EP's normative aspirations. However, since EP's normative project seems to derive its worth from EP's descriptive clout, one cannot coherently endorse the former without the latter. This does not mean that EP's descriptive capacity proves EP's normative capacity. Nor does it mean that the

gains made by EP in the descriptive realm contribute to its normative project. EP's legitimacy in either a descriptive or normative capacity are different questions, each requiring different and separate arguments.\* And it is only EP's normative project that brings EP into direct contact with ethics proper.

EP's normative project adopts a double-pronged approach in its attempt to pierce the ethical realm. I call EP's normative project evolutionary ethics. Evolutionary ethicists build their normative project upon EP's descriptive project. However, they do so in opposite ways. The first group attempts to show how EP's insights substantiate ethical beliefs. I call this group the substantiators. The second group aims to show how EP's insights undermine ethical beliefs. I call this group the skeptics.

## **The Argument**

I argue that EP's normative project is a failure. Both the substantiators and the skeptics fail to understand the is/ought distinction, and its implications for the ethical realm. By showing that facts cannot be prescriptive, and that norms cannot be derived from or reduced to facts, the is/ought distinction establishes the independence of the ethical realm. Because evolutionary ethicists base their normative claims on EP's descriptive claims, they flounder on the rocky shores of the is/ought distinction. Ethics proper requires a form of ethical inquiry that does not violate the is/ought distinction. Therefore, I defend a non-naturalistic variant of moral realism. I argue moral realism corrects the failures of evolutionary ethics. Further, moral realism is

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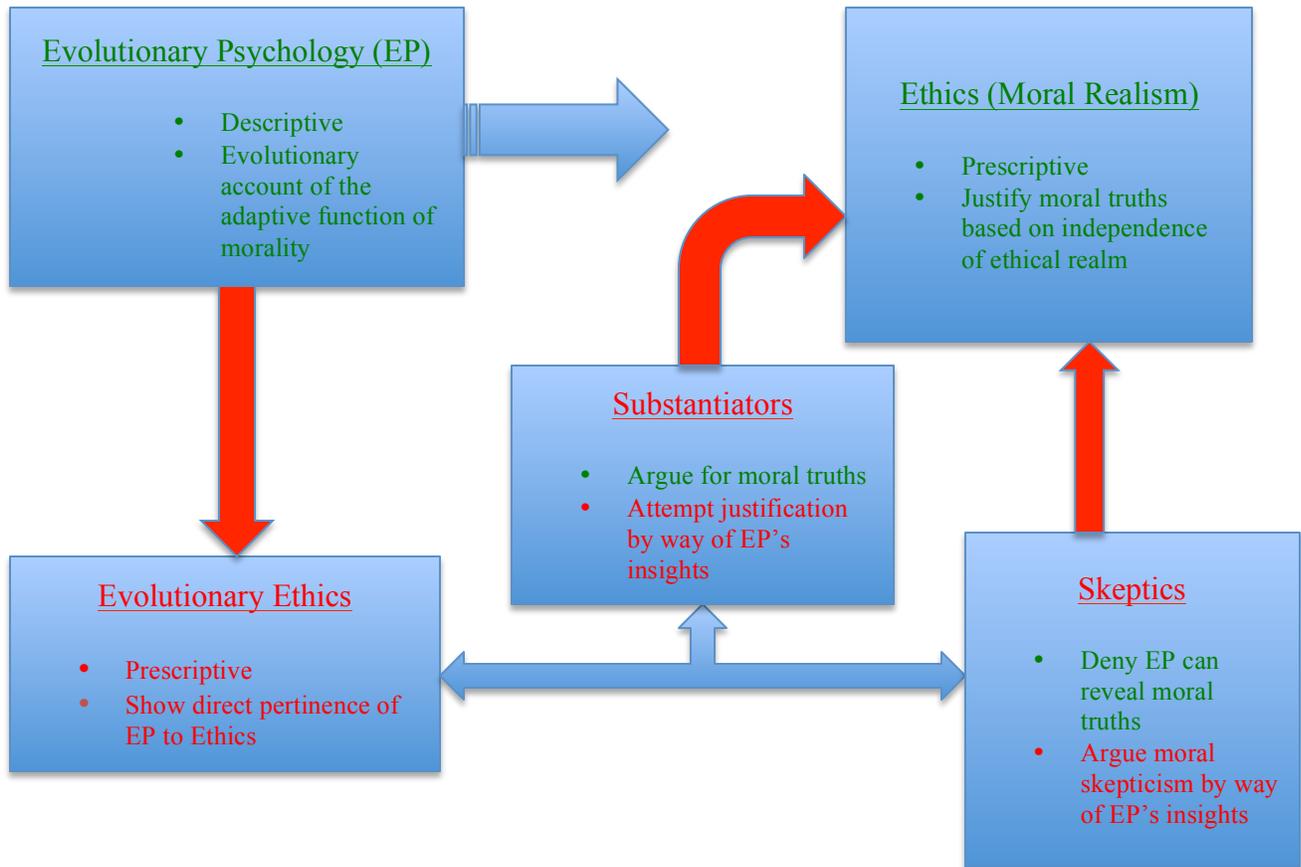
\* In considering EP's normative capacity, the question of its descriptive capacity can be bracketed. Even if EP described, with perfect accuracy, why we hold our ethical beliefs, its normative pertinence would not follow.

immune from any of EP's external substantiation or skepticism. I conclude that the relationship between EP and ethics is one where EP indirectly informs, but never guides, ethical inquiry.

## **Layout**

Part I briefly introduces EP's descriptive project. Chapter One introduces thorny epistemological and ontological questions that will continue into our examination of evolutionary ethics. I conclude, with some caveats, that EP's descriptive project is commendable, capable of providing valuable insights into our moral behavior. Part II critiques evolutionary ethics. Chapter Two shows why EP's descriptive success does not translate into normative victories, by finding the is/ought distinction to be insurmountable. Chapter Three reveals the substantiator's violation of the is/ought distinction, and the question-begging ethic that results. Chapter Four exposes the doubly contradictory ethic of the skeptics. Part III introduces and defends moral realism. Chapter Five explains how moral realism supersedes evolutionary ethics, by respecting the implications of the is/ought distinction. Chapter Six proves moral realism to be secure from problems commonly posed by EP. I then conclude by articulating the correct relationship between EP and ethics.

**Figure 1: Argument by Arrows & Boxes**



The above chart outlines the argument of my thesis. I argue that EP, in a descriptive capacity, is a commendable scientific endeavour, assuming it complements itself with cultural approaches to human behaviour. On the other side, Ethics is a well-founded theoretical enterprise, which, if it does not successfully show particular moral truths, nonetheless establishes the possibility of such truths, and reveals the only manner in which those truths can be arrived at (i.e., by reasoning). In the middle, we have Evolutionary Ethics, a mistaken endeavour that tries to show the normative significance of EP's findings. Evolutionary Ethics can take two routes: substantiation or skepticism. Substantiators are correct in their belief of the possibility of moral truth, yet incorrect in their supposition that it is established by empirical knowledge. On the other hand, Skeptics are correct in their belief that EP cannot reveal moral truths, but are incorrect in their supposition that this is because EP shows that no moral truths can be said to exist. Both Substantiators and Skeptics are mistaken in their attempt to show the normative significance of EP's findings for Ethics, and thus fail to present Evolutionary Ethics as a viable endeavour. The arrow pointing from EP towards Ethics denotes that EP, as a descriptive project, is relevant to the normative project of Ethics insofar as EP shows possibilities for human flourishing, the justifications for which Ethics then discovers and elaborates

## PART I: THE DESCRIPTIVE REALM

### Chapter One: EP's Descriptive Project

#### *Introduction*

This chapter explores EP's capacity to explain moral behavior within the Neo-Darwinian paradigm. As stated above, EP's descriptive capacity is not my main concern. As such, an in-depth scrutiny of EP's many particular claims concerning moral behaviors is not given here. The point of this chapter is not to give the reader a firm understanding of the science EP rests upon, or an exhaustive survey of the debate in the literature.\* This chapter is necessary insofar as it begins to introduce crucial themes that continue into the discussion of evolutionary ethics. These themes pervade EP's descriptive project, but constitute theoretical questions that are not resolvable at the level of EP's descriptive capacity.

The two themes of this chapter are EP's biological bias and EP's use of reductionism. Each theme is closely connected to, and mutually supportive of, the other. However, a rough causal order characterizes their relationship. First, EP understandably adopts a materialistic approach to morality. But EP therefore (mis)understands biological factors to be more scientific and objective than the cultural factors of the social sciences and humanities. Second, because material factors are more fundamental than (or primary to) cultural or non-materialistic factors, the latter are seen as reducible to the former. Because of EP's biological bias and reductionism, EP tends to downplay cultural approaches. More importantly, EP tends to dismiss the possibility

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\* Disputes over the role of adaptationism, speciesism, heritability, and so on are very much alive.

of non-materialistic objectivity in the ethical realm. Thus, EP often hinders the interdisciplinary approach required to address the questions with which it is concerned.

### *Layout*

I believe EP presents a lot of good science in the descriptive realm. However, EP's descriptive project is also plagued by (unnecessary) problems. One side of the problem is conceptual issues (i.e., biological bias and reductionism). The other side is EP's historical development as an idea. I begin by briefly showing EP's historical misconception, from the hijacking of Darwin's ideas, to eugenics policies, and the sociobiology debate. I then look at EP's biological bias and reductionism through the ideas of Edward O. Wilson. I conclude that if EP can mitigate these problems, it will continue to represent a good science of human behavior. However, EP will always be a theory *about* morality, and not a moral theory per se.

### *Darwin's Disciples*

EP approaches human moral behavior as part of the natural world. Understanding humans as part of the animal kingdom is not a recent development. Considering the role of biology, when it comes to ethics, has a long history. However, despite that important history, Charles Darwin is a useful starting-point. It is from Darwin that we get the mechanism of natural selection, which still comprises the key characteristic of EP's paradigm. There have been some important modifications, but all of EP's advocates are very much Darwin's disciples.

In 1859, Darwin published *On the Origins of Species by Means of Natural Selection*. Ironically, Darwin's account of the origin of species showed that "species" were, in a sense, an artificial construct. This is because Darwin showed that all organic life on earth shared a

common ancestor. Darwin does not actually come right out and say all life has a common ancestor. But he does say, “I can entertain no doubt [...] that the view which most naturalists now entertain, and which I formerly entertained—namely, that each species has been independently created—is erroneous” (Darwin, 2006: 4). But if species are not immutable, then what explains the variation we see around us?

According to Darwin, “[a]ll these results [i.e., variation] follow inevitably from the struggle for life” (Darwin, 2006: 40). In order to frame his ideas on the struggle for existence, Darwin adopted “the doctrine of Malthus, [and] applied [it] to the animal and vegetable kingdoms” (Darwin, 2006: 3). That is, the struggle for existence follows from “their [i.e., animals and plants] high geometrical powers of increase” relative to those of the resources necessary for life. In other words, because many more individuals are born than can survive, any individual that displays beneficial variations, be they physical or behavioral adaptations, will have a better chance of surviving. Thus, such individuals are *naturally selected*. Lastly, because of “the strong principle of inheritance” anything that “tend[s] to the preservation of that individual, will generally be inherited by its offspring” (Darwin, 2006: 31).

The result is that adaptations are passed down until they proliferate in the gene pool, and a new “species” has been formed. Darwin called this principle, by which slight variations are selected for and passed down, natural selection (juxtaposing it with the domestic selection by man). Darwin was “convinced that natural selection has been the main but not exclusive means of modification” (Darwin, 2006: 4).

Darwin’s genius was to discover the mechanism of natural selection. He supported his argument “by giving long catalogues of facts” (Darwin, 2006: 4). Today, that long list of facts has been added to, and there is no doubting the fact of evolution. It is now the stuff of junior-

high biology classes. However, there is one corollary of the Darwinian paradigm that is often over-looked. This is that behavior, along with physiology, is, at least in part, a biological adaptation. This oversight is sometimes called the “neck down fallacy” (Dawkins, 2004: 38). That is, the deficient supposition that evolution has only played a role in shaping the way we look, but not the way we behave. Twelve years after the publication of the *Origins*, Darwin shared his thoughts on how evolution had influenced human behavior.

In 1871, Darwin published *The Descent of Man, and Selection in Relation to Sex*. Recall that Darwin had said natural selection was not the only means of modification. In the *Descent*, he articulated his theory of sexual selection, whereby certain traits are selected for not because they bestow a survival advantage per se, but because they are found attractive to the opposite sex. Sexual selection has had a profound effect on human behavior. Of interest to us, are Darwin’s thoughts on evolution’s role in the development of man’s moral sense.

Within the *Descent*, we find a whole chapter, entitled “moral sense,” devoted to the natural history of morality. At the outset of his discussion of morality, Darwin notes that, “[t]his great question has been discussed by many writers of consummate ability,” and he here mentions Immanuel Kant by name (2004: 120). Darwin’s continues, “my sole excuse for touching on it [i.e. the topic of morality], is the impossibility of here passing it over; and because, as far as I know, no one has approached it *exclusively from the side of natural history* (120, emphasis added). Darwin thus reveals that he sees himself as presenting both a particular and limited angle on the topic of morality: that of natural history, which I call the *is* of morality. There is nothing to suggest that he saw himself as contributing to ethics proper. Indeed, as he continues, there are hints that seem to indicate that he say such a contribution as impossible.

Darwin takes man's sociability as a starting point for morality (Darwin, 2004: 123-132). He thus dispels the misconception that evolution has produced selfish, competitive individuals, and focuses on our altruism and cooperation. He looks at the similarities and differences in different cultures and different times (133-135). He draws illuminating parallels with monkeys (135) horses (125), dogs (128, 138), and other social animals. He argues that moral capacities are heritable (passed down), and that moral beliefs often seem instinctual (145). All of this has become part and parcel of contemporary EP, carried on in the work of David Barash (1986), Richard Dawkins (1976; 1982; 2004), Frans de Waal (1982; 1989), Steven Pinker (2002; 2011), and many more. However, again, unlike many of his disciples, Darwin gives no indication that he saw himself as having contributed to ethics proper. Though it is beside the point, Darwin may have ascribed to a relationship between EP and ethics much like that which I will advocate below, and for the same reasons.

It is true that Darwin's examination of the moral sense is "an attempt to see how far the study of the lower animals throws light on one of the highest physical faculties of man." But on the same page, he also clarifies that, "I fully subscribe to the judgment of those writers who maintain that of all the differences between man and the lower animals, the moral sense or conscience is by far the most important" (120). He thus draws an important distinction, all too often blurred in this literature.\*

Darwin says that this *difference* "is summed up in that short but imperious word *ought*, so full of high significance" (Darwin, 2004:120, emphasis in original). Darwin does not expand on what the "high significance" of ought might entail, but certain passages are telling. Darwin notes

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\* And what's more, this distinction is often blurred while the author uses the authority of Darwin's name.

that monkeys and dogs perform actions we would call moral, “[b]ut in the case of man, [he] alone can with certainty be ranked as a moral being” (Darwin, 2004: 135). Animals act on instinct, whereas man “further feel[s] that he ought to.” And “[m]an in this respect differs profoundly from the lower animals” (Darwin, 2004: 136). And this difference is due to “the activity of his mental faculties, [he] cannot avoid reflection” (Darwin, 2004: 136).

In the above quotations, Darwin shows himself to be aware of something that many of his disciples have forgotten: that there is a difference between a naturalistic account of morality, and ethics proper. Darwin singles out *ought*, and connects it to reason. This is also what I will do below, providing the further rational Darwin omitted. Though the above quotations exhaust Darwin’s commentary on the issue, they are important. Darwin’s sentiment represents one all too often overlooked by contemporary EP.

Granted, all sorts of behavior have biological origins, and therefore legitimately fall under the biologist’s purview—this is why Darwin says it would have been impossible for him to have passed over the topic of morality. But a biological bias and reductionism do not follow, and that is why Darwin emphasizes that he only means to present a naturalistic account. The *Descent* can be seen as the first work of EP. It established the significance of biology. Never again could one ask questions of behavior without looking through a biological lens. Or so it seemed.

### *The Sociobiology Debate*

I follow Wilson in identifying the sociobiology debate as the “continuance of the historic conflict created in the social sciences and humanities by the mechanistic examination of human nature through the instruments of conventional biology” (Caplan, 1978: xi). Sociobiology was “the most direct bridge from the natural sciences to the study of human nature, and thence to the

social sciences” (Caplan, 1978: x). The biological approach had a meteoric ascent to prominence. It ruffled Christian sensibilities, made controversy, fed into racist ideas and eugenics policies (Kevles and Hoods, 1992), and was subsequently suppressed during the early-mid 1900’s. Even quite recently, eminent scientists advocated eugenics and forced sterilization (Allen, 1994). And Nazism made the link between genetics and eugenics no longer politically tolerable (Kaplan, 1994).

This link between a biological approach to human nature and racist ideas, although perhaps ordinary, is in no way necessary or logical.\* EP repeatedly conjures fears of racism, sexism, and biological determinism (Tobach & Rosoff, 1994). Disgruntled academics counter by giving cultural approaches. Each extreme lives off the excesses of the other. The difficult work of trying to figure out how each approach complements the other is abandoned. EP advocates are not advancing racism, but pursuing the truth. The irony is that even if EP found racial differences to be 100% biological, racism would not be advanced in the slightest. These fears are misplaced, and reflect how we do not yet have a framework for how biological knowledge relates to our values. Suffice it to say that EP’s reputation has been colored for reasons disconnected from its own shortcomings. This historical development has contributed to advocates of EP presenting an overly hegemonic agenda, and critics rejecting EP as a result.

Despite the dominance of nurture during the early and mid-20th century, by the 1960s, genetics had moved to the central place in the life sciences (Keller, 1992: 286). Genetics, evolutionary theory, and micro-biology were the three pillars of the life sciences. Each had garnered much legitimacy and was understood to have powerful explanatory power in the hard

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\* Genetics does not imply eugenics. Later on, my whole argument becomes that none of this biological knowledge necessarily implies any prescriptive statements.

sciences. (It is interesting that EP has derived legitimacy from these established pillars of the natural sciences, at the same as sometimes playing fast and loose with them (see Sober 2000).) It was becoming increasingly apparent that mental capacities and personality traits were moderately heritable. This provided a genetic foundation for social relations, connecting the life sciences to the social sciences.

So important was Wilson's book, and the themes it espoused, that it merits close examination. Wilson's book espoused certain themes that still characterize what has been called the sociobiology debate today (or EP debate, etc.). Wilson's *Sociobiology: the new synthesis* (1975) represented the re-emergence of the biological in contemporary consciousness. Basically, the book showed the capacity for a biological approach to impinge on questions traditionally dealt with by the social sciences and humanities. Wilson wanted to extend the framework of biology to behaviors, cultures, and social relations that had been within the purview of the social sciences. But it was more than an extension. The social sciences were to be subsumed, if not eventually replaced.

As Wilson boldly stated, "It may not be too much to say that sociology and the other social sciences, as well as the humanities, are the last branches of biology, waiting to be included in the modern synthesis" (Wilson, 1975: 5). Wilson added the caveat that "[w]hether the social sciences can be truly biologized in this fashion remains to be seen." I believe that, to the extent that the social sciences or humanities are being descriptive, they can be furthered by, and complemented with, the biological approach. However, to the extent that the logic of inquiry is prescriptive, the biological can only inform (at best), but never guide such an enterprise.

Wilson himself has somewhat moved away from his simplistic understanding of the relationship between biology and culture. He later described *Sociobiology* as "a first amateurish

attempt” to apply the biological approach to human behavior (Caplan, 1978: 4). Near the beginning of *Sociobiology*, Wilson warns that “[i]t is out of such deliberate over-simplification that the beginnings of a general theory are made” (Wilson, 1975:5). I think this is fair, and certainly forgivable. The question becomes whether sociobiology, now reformulated as EP, is capable of moving beyond these over-simplifications. My aim in examining Wilson’s book is not to criticize his outdated statements to score points. Indeed, my whole purpose in refining EP is to ensure we do not throw out the baby with the bathwater. Both themes I examine here, I have chosen because I identify them both as problematic, and as pervasive throughout current EP.

Wilson was not the first to make such claims, but he synthesized them, wrote them out in a big book, and got a lot of press for it. For an 800-page book, it was really only the first and last chapters that were so controversial (which make up only five percent of the text). Indeed many of Wilson’s critics, biologists themselves, had no problem with the good, painstaking science put forward for the vast majority of the book. But when it came to his talk of humans, he was seen as reaching unwarranted conclusions based on scant evidence (Bradie, 1994: 11). Within his last chapter, we find our two central themes that will continue into our discussion of evolutionary ethics.

### *Biological bias*

Sociobiology was the reemergence of the biological with a vengeance. I have briefly shown why this was partly due to historical reasons. Biology had been unfairly constrained for long enough. But the bias for the biological, or for material factors, is more than simply a recent historical product. The biological/material bias gravitates around central questions of epistemology and ontology.

The importance Wilson gives to the biological as a starting (and ending) point is evidenced right from the third sentence of *Sociobiology*: “The biologist [...] realizes that self-knowledge is constrained and shaped by the emotional control centres in the hypothalamus and limbic system of the brain.” Thus, he continues, “[w]hat, we are compelled to ask, made the hypothalamus and limbic system? They evolved by natural selection” (Wilson, 1975:3)

This fact is beyond question. My criticisms against EP are not directed at the fact of biological evolution, but only to how it is applied to behavior, and ethics proper. Wilson continues: “[t]hat simple biological statement must be pursued to explain ethics and ethical philosophers, if not epistemology and epistemologists, at all depths” (Wilson, 1975:5). Wilson begins much more ambitiously than did Darwin! The fact that the brain is a product of evolution, and the organ by which we philosophize, does not necessarily entail that knowledge of the evolution of the brain sheds light on the content of moral philosophy. This is a non sequitur, and an assumption upon which much of even the best EP is based.

Nonetheless, Wilson believes that “[o]nly when the machinery [of the brain] can be torn down on paper at the level of the cell and put together again will the properties of emotion and ethical judgment become clear” (Wilson, 1975: 575). There are two levels on which this statement can be understood, the level of explanation and the level of justification. It may be possible that the machinery of the brain can be broken down to perfectly explain all behavior. If achieved, doing so would satisfy the purposes of explanation. However, the level of justification would still be left wanting. Explaining the causal reasons behind why I believe something to be right does not begin to determine whether or not whatever I believe is actually right. Doing so is the purpose of justification, a process EP is unable to take part in.

Wilson rightly noticed that the social sciences have a “largely structuralist and non-genetic approach.” As such, they “attempt to explain human behaviors primarily by empirical description of the outermost phenotype and by unaided intuition” (Wilson, 1975: 4). The implication is hardly concealed. Unaided intuition could never be as objective or factual as a scientific, genetic approach. It is therefore less robust, in need of replacement with something less wishy-washy.

Wilson is half-right in this criticism, but he goes wrong due to his failure to distinguish between different logics of inquiry. It is certainly true that a solely cultural approach to human behavior, which ignores possible biological perspectives, is impoverished. Descriptive theories of human moral behavior must be consistent with the facts of evolution. To the extent that we wish to describe behavior accurately, biological influences must always be considered, and will often be found to be relevant. This is not to say that it follows necessarily that EP (or chemistry or physics) therefore tells us anything interesting about human behavior. It is possible that evolution has given rise to behaviors that cannot be understood in purely evolutionary terms (Dawkins, 1976: 201). If this is true, attempting to do so would mean misconstruing such behaviors. Even worse, when it comes to a prescriptive logic of inquiry, it is not the case that further references to additional facts serves an important purpose. This is due to the nature of the ethical realm, where arguments and reasoning are the alpha and omega.

Wilson, and his followers, often keep to a wholly descriptive logic. They focus on the *is* of morality. With the exception of no more than five sentences, Wilson does not give any prescriptive moral statements in *Sociobiology*. To give a biological account of sex or racial differences is not to establish or endorse a hierarchy. To show that women universally spend more time raising children is not to say that they should. Nonetheless, such biological

explanations raise the hackles of many academics and laymen. But there is nothing prescriptive here. On their own, descriptive statements can never be prescriptive. Much of EP's work on morality is taken to be prescriptive simply because of the assumptions we read into it. So how do our minds make these illogical leaps?

When EP subtly switches from a descriptive to a prescriptive logic, an implicit, but widely accepted, value is doing the heavy lifting. A prime example of an often hidden value is that of social stability. One can easily move from the descriptive statement (that natural selection selected for less violent behavior and cooperation), to the prescriptive statement (that social stability is a good thing). Because the value of social stability is so widely accepted, we nod our heads when this shift happens. We do not realize that the fact that our genes have played a role in our thinking social stability to be a good thing does not actually make it a good thing. Nor does it make it a bad thing. It is wholly beside the point. Genes never contribute to, or undercut, goodness. I only assert this at this juncture. Below, in Part II, this argument is articulated.

The only reason it seems that genes are somehow contributing to goodness is because of the potency of social stability, which is the hidden value assumption doing all the work. However, sometimes the value assumption hidden within a descriptive statement, once examined, is absurd. Wilson attempts to link ethics to genetics, asserting, "[a] genetically accurate and hence completely fair code of ethics must also wait" for advances in neurobiology (Wilson, 1975: 575). This statement should raise a few eyebrows. It is not at all clear that any significant relationship exists between genetic accuracy and fairness. Does Wilson believe that if I understood your genome better, I would then know whether I ought to actually repay the money you lent me? Or that if only you had been able to scrutinize my chromosomes more closely, then you could have known if you should lend me money in the first place? Surely not.

Perhaps I am being unfair in picking this one sentence from Wilson, and he does not really mean it that way himself (as I am sure he actually does not). However, Wilson has not abandoned the absurdity of attempting to link genes to goodness. In *On Human Nature*, he asserts that the sheer intricacy and ancientness of the human genome obliges us to do everything we can to preserve the species (1982: 196-197). Is the intricacy and ancientness of our genome the reason due to which preserving our species is a good, insofar as it is a good? And if so, when and how is the value inherent in our genetic intricacy overridden by competing goods? Could the last few women on earth be justifiably raped for this reason?

All EP, insofar as it aspires for normativity, depends on forging an impossible link between genes and goodness. As such, EP's normative project smashes up against the is/ought distinction. Wilson does not even mention the is/ought distinction in *Sociobiology*, though he does proceed to misunderstand it later in his career. The is/ought distinction is so easily misunderstood due to our biological bias. Since genes seem to come causally prior, and constitute the parts of the whole, then goodness must be reducible to them in some way. Alternatively, if goodness cannot be found to be reducible to this fundamental level, then there is no objective goodness, since such a thing requires a material, testable, quantifiable existence. These are the two approaches of evolutionary ethics.

EP adopts a logic of inquiry that attempts to explain behavior. This entails a focus on physical facts. This focus becomes an over-emphasis when cultural factors are only understood as derivative. And this emphasis becomes a mistake when EP unwittingly changes from descriptive to prescriptive, without changing its logic of inquiry appropriately. This is something Wilson repeatedly does, treating moral philosophy as if it is an "explanatory" or "predictive" enterprise, requiring ever more "empirical" evidence and "technological advancement" to make

its assertions (Wilson, 1975: 562). However, moral philosophy is not explanatory, predictive, empirical, or dependent on technological advancement. It is due to these mistakes that Wilson wrongly believes moral philosophy is capable of being “biologized” (Wilson, 1975: 562).

Since a biological approach is more rigorous—cultural approaches only ever scraping the “outer phenotype” of human behavior—biological factors are therefore primary to and more fundamental than cultural factors. This means that cultural explanations can and should be reduced to biological, and perhaps even chemical, explanations. The deeper, the more fundamental, and thus the better. Wilson is looking “to establish that a single strong thread does indeed run from the conduct of termite colonies and turkey brotherhoods to the social behavior of man” (Wilson, 1982: 63).

### *Reductionism*

Reductionism is a very important concept in the relevant literature. It is a “key word” in EP, and is used both frequently and inconsistently (Williams, 1976). Thus, it is important to understand the word and the concept it applies to. This way we know not only when the word is used correctly, but if the concept is appropriate. Here I evaluate both the strengths and weaknesses in how Wilson, and his successors, understand and utilize reductionism. I conclude that the mistakes of reductionism are mitigated once a biological approach is meaningfully complemented with a cultural approach. However, reductionism, while merely problematic in the descriptive realm, is impossible between the descriptive and prescriptive realms.

The issue of reductionism goes right to the core of unresolved debates in the philosophy of science. Sergestrale (2000) has correctly seen that beneath arguments over reductionism is a debate concerning different perspectives on scientific inquiry, and what counts as good science.

Reductionism is a method of scientific examination. It is not necessarily a dirty word, though it gets thrown around a lot as if it can never be a useful approach to understanding some phenomenon. The standard understanding of reductionism is the teasing apart of the object of study into its constituent elements for the purpose of understanding and analysis (see Keller, 2010: 19-31). As such, reductionism need not be controversial, although we can see how it could become so. That is, when an object of study is such that breaking it apart into its constituent elements would not result in a more fundamental analysis or give one a deeper understanding.

This is how Wilson and his contemporary followers understand reductionism: “[T]he heart of the scientific method is the reduction of perceived phenomena to fundamental, testable principles. The elegance, we can fairly say the beauty, of any particular scientific generalization is measured by its simplicity relative to the number of phenomena it can explain” (1982: 11).

I have included this entire quote because it is very telling. Notice he says “the heart,” implying other methods of analysis that are not based on reductionism are secondary or subsidiary. He shows that he understands the relationship between “reduction” and “fundamental” to be such that one must reduce to get to the fundamental properties of an object. Also, it is at this low level of reduction that the object becomes “testable” rather than merely “perceived,” as Wilson cannot imagine how one could “test” within a theoretical approach. Lastly, he thinks elegance is found at the level of simplicity, while his critics charge him with oversimplification and the subsequent loss of the beauty and elegance of behavior. Of course, the criticism is not that Wilson’s theories are less aesthetically pleasing or emotionally moving, but that his reductionism misses out on important truths, and therefore lacks beauty and elegance.

I will scrutinize Wilson’s conception of reductionism and the role he wants it to play in EP. Before that though, I must say more on his view, to ensure I don’t make a straw man of him.

Wilson is quite right when he says that reductionism—understood as dissecting an object, isolating variables, manipulating variables, and otherwise experimenting so that facts, conclusions and theories can be drawn—is common and legitimate practice in the hard sciences. He may even be somewhat justified in viewing such an approach as in some respects better than the forms of analysis carried out in the social sciences. However, Wilson is trying to garner too much legitimacy from the practices of the natural science in claiming that his use of reductionism in EP falls within the legitimate boundaries of sound reasoning.

There is a difference between the reductionist method, which I have begun to describe above, and reductionist metaphysics. Reductionist metaphysics assumes that higher order phenomena are always illuminated by the lower order workings when seen from that reduced perspective. EP's advocates, such as Wilson, Dawkins, de Waal, Barash, Churchland, etc. are aware of this difference. They maintain that they subscribe to the reductionist method, but not reductionist metaphysics (Segetrale, 2000: 285). This, then, means that they break things down in order to rebuild them, top to bottom, and in so doing, arrive at a superior understanding.

As Wilson says in *On Human Nature*, raw reduction is only half the scientific process:

The remainder consists of the reconstruction of complexity by an expanding synthesis under the control of laws newly demonstrated by analysis. This reconstitution reveals the existence of novel, emergent phenomena. When the observer shifts his attention from one level of organization to the next, as from physics to chemistry or from chemistry to biology, he expects to find obedience to all the laws of the level below. But to reconstitute the upper levels of organization requires specifying the arrangement of the lower units and this in turn generates richness and the basis of new and unexpected principles (1980: 11-12).

Reductionism supposes that a system is made up of parts, which contribute to the system. These homogeneous parts exist in isolation, and come together to make wholes. The parts

possess intrinsic properties, which they lend to the whole. In the simplest cases, the whole is simply the sum of the parts. More complex systems allow for the interaction of parts to produce added properties of the whole (see Schifellite, 2011: 75). As Levins and Lewontin state, the central assumption of this view of reductionism “is that it supposes that the higher-dimensional object is somehow ‘composed’ of its lower-dimensional projections, which have ontological primacy and which exist in isolation, the ‘natural’ parts of which the whole is composed” (1985: 271).

Critics such as Lewontin are wary of this assumption leading to biological reductionism in the study of human behavior. I think there is something to Lewontin’s and others’ apprehensions. However, I think it is possible to complement a biological approach to behavior with a cultural approach, capable of analyzing the higher levels of reality as they are, thus mitigating the mistakes reductionism makes.

The harm of reductionism in the descriptive sphere is only of secondary concern to me. Reductionism becomes most interesting, and most flawed, when it continues from the descriptive into the prescriptive, using morality as its bridge. Morality can be dealt with both as an *is* or an *ought*. But reductionism misunderstands the distinction between these two aspects of morality, not recognizing that each requires its own logic of inquiry.

The controversial aspect of Wilson’s defense of reductionism is twofold. First, that he is unable to rebuild the complexity of human behavior from the interplay of genes. That is, he cannot go from molecules to morals—somewhere in this relationship is a gap. Wilson might retort that the supposed gap is illusory, and it is possible to proceed from molecules to morals. The argument then becomes that EP’s capacity to do so is only constrained by the current technology or dependent on the next intellectual breakthrough. There may very well be truth to

this supposition. What is likely, however, is that in order to bridge the gap, biological approaches will have to be meaningfully complemented with cultural approaches. By meaningfully, I mean that it must be acknowledged that culture is not always the handmaiden of biology. Even proceeding from biology leads one to the conclusion that our genes have allowed culture to override them. At this point, emphasizing the dominance of genetic factors over cultural factors misunderstands the latter and retards further examination. However, even if successful, such a complementing-approach would only be describing the *is* of morality, explaining what we believe, and why we believe it. It would not be examining the justifications behind those beliefs in order to determine their ethical veracity.

This leads to the second, and more important, criticism of Wilson's reductionism. That even if the biology-culture distinction is illusory, it does not follow that the is/ought distinction is assailable. The biology-culture distinction highlights the difficulty of merging the study of different properties (i.e. biological and cultural properties). But both biological and cultural approaches adopt the same descriptive logic of inquiry, in search of causal explanation—not justifications. It is the different logics of inquiry that stop reductionism in its tracks when it trespasses upon ethics proper. The gap may not exist between biology and culture, but it exists between description and prescription.

### *Conclusion*

In sum, EP represents a promising approach to understanding moral behavior. Naturally, it is not as expansive as its supporters cheer, nor as simplistic as its critics jeer. EP's biological bias tends to result in EP downplaying cultural approaches. However, EP's own success in the descriptive realm depends on it finding a way to complement its biological approach with

cultural approaches. Also, it is likely that EP loses much of the complexity it ostensibly hopes to retain when it reduces cultural properties to biological properties. Neither EP's biological bias nor its hyper-reductionism are necessary faults, and they can be corrected. Already, some genuine interdisciplinary work is being done. But a framework is still required to help with this.

More important for this thesis is the conclusion that the biological bias implies that non-naturalistic knowledge is not objective. And that reductionism implies a link between natural properties and ethical values. Both of these mistaken assumptions pervade evolutionary ethics, and doom the endeavor. I now turn to why these mistakes seal the tragic fate of EP's normative project. The aim of this introductory chapter has been twofold: First, to briefly highlight some of EP's problems in the descriptive realm. Second, to show how these mistakes leak into the prescriptive realm.

## **PART II: EP AS A NORMATIVE PROJECT**

### **Introduction**

This chapter explores EP as a normative project. That is, I examine EP's attempt to use its findings on human moral behavior to contribute to ethics proper. This attempt by EP is known as evolutionary ethics. What is meant by ethics proper is not an account of the moral beliefs people hold, nor a causal description of how they came to hold those beliefs, nor a report on how adamantly or leniently they might hold those beliefs, nor an estimation of the overall number of people who might hold this belief, nor an explanation of when a particular moral belief first appeared, etc. All such questions may constitute the trimmings of ethical inquiry, but are not its primary concern. Rather, ethics proper asks one quintessential question: what are the reasons given (i.e. the justification) for these moral and ethical values? In so doing, ethics thereby asks two interrelated sub-questions. First, which of these beliefs can be considered objectively true (or false)? And why can they be considered as such?

I start Part II by merely stating the role of ethics, without defending it, in order to be able to begin with this further statement: that is, EP contributes to ethics if and only if it can begin to provide answers to, or somehow otherwise shed light on, which of our moral beliefs are true, or untrue, and why. This is a requirement that evolutionary ethicists set for themselves. I conclude that they fail to deliver the goods.

The failure of EP to directly contribute to ethics is not merely the result of insufficiently technologically advanced scientific tools and programs. That is, EP's failure to contribute to ethics cannot and will not be remedied or mitigated as its tools advance in precision, and as the links between genetics and behavior are more fully teased apart and understood. All of these

would no doubt boost EP's important role in the descriptive realm, and I look forward to such developments. But they can do nothing to usher EP into the normative realm. This is because EP operates according to a different logic of inquiry, which does not and cannot pierce the ethical realm. As such, the question, "Do our moral beliefs, and the cognitive process through which we examine and reach them, have a biological basis?" is simply not directly relevant to ethics proper. Such a question is correctly relegated to the same status as those questions listed above, i.e. the trimmings. EP will always be external to ethics.

## **Layout**

Chapter Two begins with discussion of logics of inquiry. The aim is to establish that EP is a descriptive project, through and through. I end with an in-depth discussion of the is/ought distinction. Concluding our discussion of the is/ought distinction, we will be well prepared to understand the two ways in which evolutionary ethics attempts to overcome the is/ought distinction, and more importantly, why it fails to do so. Chapter Three examines the substantiators, and Chapter Four the skeptics. The failures of both lead to the need for moral realism, Part III.

## Chapter Two: The Is/Ought Distinction

### *Logics of Inquiry*

Near the beginning of the last chapter of his *Sociobiology*, Wilson states that “the role of evolutionary sociobiology will be twofold: reconstruct the history of the machinery [i.e. the brain, etc.]; identify the adaptive significance of its functions” (Wilson, 1975: 575). These two aims are securely under EP’s purview (so long as it complements itself with cultural approaches), and neither necessarily brings EP into the normative realm. As we saw, the vast majority of both Wilson’s first and last controversial chapters operate at the descriptive level of analysis. But Wilson did slip into the normative realm, as do so many of his followers. This mistake occurs due to some measure of ambiguity concerning the second role of sociobiology. That is, if morality has an adaptive significance, as it surely does, at least in part, then does this fact alone not propel EP into the moral realm? The answer is both yes and no. Yes, EP can legitimately make *is* statements concerning morality. But EP cannot therefore also make *ought* statements, when all it has to support such would-be prescriptive statements are causal stories of adaptive function, facts about the brain, and the like. Doing so constitutes illegitimately slipping between different logics of inquiry, without even perhaps realizing the important distinction.

“When discerning what is good to be pursued, intelligence is operating in a different way, yielding a different logic, from when it is discerning what is the case (historically, scientifically, or metaphysically)” (Finnis, 2011: 34). This nicely outlines the difference between EP and ethics. EP gives us facts about what is the case, historically, scientifically, biologically, etc. Now, these facts are in no way value neutral, although one can attempt to present them as such. But when a case is made as to the value of any particular fact, doing so is a completely different

endeavor than the stating of further facts. It is what Finnis (and I following him) call a different logic of inquiry. Discussing value statements, or the good, requires moral arguments, which are different from scientific (i.e., causal) explanations.

As Finnis says, in the ethical realm, “[t]he soundness of an answer to a particular question is never established or disconfirmed by the answer to the *entirely different* question of what are the physical, biological, psychological preconditions and concomitants of the raising of that question and of the proposing of that answer” (65, emphasis original). This somewhat ad hominem strategy is a favorite of many evolutionary ethicists. That is, EP supposes that if a sound causal account can be given of why we hold our moral beliefs, doing so undercuts the validity (or at least throws into serious doubt) the substantive content of those beliefs. As Ruse and others (see below) argue, “when one has given a causal analysis of why someone believes something, one has shown that the call for reasoned justification is inappropriate—there is none” (Ruse, 2009: 504). Ruse’s conclusion is due to his belief that if “normative ethics is for our own (biological) good,” that is to say an evolutionary adaptation, then “the causal account of why we believe [e.g.: our genes have ‘programmed’ us to] makes inappropriate the inquiry into the justification of what we believe” (510).

Ruse thus completely flips ethics proper on its head, removing what I claim to be its central purpose (i.e. the justification of our beliefs). He replaces it with an essentially empirical endeavor, devoid of justification. However, EP’s findings fail to promote a skeptical understanding of the ethical realm. This represents a misunderstanding of the distinction between the two logics of inquiry: one deals with facts, the other with reasons, and the former do not necessarily undercut the latter, especially when it comes to our moral beliefs. One can show, causally, that I think rape or slavery to be morally wrong only because my parents have chosen

to teach me so, or because of the particular age and geographical region I happen to have been born into. But such a causal account does not begin to scratch the surface of whether or not my beliefs about the moral wrongness of rape and slavery are true or not. In order to do so, one has to switch one's logics of inquiry, and begin to examine my reasons (i.e. justifications) for holding those beliefs.

At this point, I am sure that the evolutionary ethicist's hackles will begin to rise, as he or she will not be able to understand how I can remove the fact that my genes have possibly programmed me (and my parents!) to believe that rape and slavery are morally wrong. They might point out that, in certain situations, to hold these beliefs is biologically (and socially) advantageous. Say, for instance, when a female relative, let us say one's sister, is about to be raped. This would be unfortunate for any brother, from a strictly biological point of view, because now a copy amounting to  $\frac{1}{4}$  of his genes (or  $\frac{1}{2}$  in the case of the mother) is supposedly being raised without a father,\* which reduces the child's chances of survival and reproduction. Or imagine that the dominant societal norms reject slavery as an economic strategy. In such a case, advocating slavery would be disadvantageous, as it might ostracize one from one's community, on which one depends for one's livelihood. So we see in both cases it is quite plausible that there may have evolved some biological mechanism that says "reject rape, especially when it threatens one's own female relatives," or, "accept the dominant norms when not doing so would mean social isolation" because doing so would seem to reap the greatest

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\* Notice that most people, albeit wrongly, might assume that the rape of a wife by her husband is less morally troublesome, if at all, than the rape of a woman by a stranger, as if the fact that the rapist-father sticks around to raise the product of his crime is somehow relevant. I believe a biological approach to this moral inclination has some purchase here.

biological advantage. Given this, how can this causal backstory not be relevant to the validity of those beliefs? asks the evolutionary ethicist.

The reason that none of the above is relevant to the entirely different question of whether or not rape or slavery is morally wrong is because the above are factual, empirical questions, while the question of wrongness is a moral question. That there is indeed an important distinction will be made clear in the following sub-section concerning the is/ought distinction. The is/ought distinction shows that empirical knowledge, such as the universality of a desire, is not a sufficient basis for inferring that the object of that desire is really desirable, or objectively good. Similarly, such an inference is not afforded by the fact that this desire or belief is a manifestation of a deep or ineradicable part of the human mind, or that it is common to all animals, or unique to only humans (see Finnis 2011: 66). But such empirical knowledge is all evolutionary ethicists have to offer, and in doing so, they believe they directly pierce the ethical realm. They might believe that they are substantiating the ethical realm (i.e. showing why our moral beliefs are indeed true, as evidence for them can be found at the genetic and neurological level). Contrastingly, they might believe they are providing reasons to be skeptical of our moral beliefs, and undercutting the possibility of objectivity when it comes to ethical inquiry (because our moral cognition is the product of an arbitrary biological process). Though both of EP's attempts to affect ethics proper take opposite approaches, they both share the mistaken belief that the is/ought distinction can be overcome.

### *Is and Ought*

This discussion of the is/ought distinction brings us to the heart of everything—whether or not EP can contribute to ethics. But if the is/ought distinction is the heart of the matter, it will

not be given blood until our discussion of the ethical realm. Because my argument has to be unpacked step-by-step, my treatment of the *is/ought* distinction must be somewhat abstract. However, it will be further elaborated, and given concrete examples, in what is to follow in the next chapters. That said, the reader should leave this subsection with a firm understanding of why there is an insurmountable distinction between questions of *is* and questions of *ought*, as well as what that distinction entails—and does not entail—for the discipline of ethics.

The topic of a distinction between *is* and *ought* represents a very old debate in the history of political thought, and beyond. I begin our exploration of the *is/ought* distinction with David Hume's thoughts on this topic. Similar to the case of evolution and Darwin, thinkers were discussing the *is/ought* distinction long before David Hume. However, David Hume presented the problem with a particular prescience that has proved lasting. There are some minor problems involved with using Hume's particular characterization of the *is/ought* distinction, which if not addressed head-on, can become major problems for the rest of my thesis. Therefore, I show how they are overcome, and then defend my particular interpretation of Hume.

After having dealt with Hume, I proceed to the thoughts of G. E. Moore on this topic. Again, similar to the case with Hume, there are parts of Moore's understanding of the *is/ought* distinction that I endorse and adopt, and other parts that I have problems with, and discard. In the relevant literature on evolutionary ethics, the problem of the *is/ought* distinction looms large, and rightly so. The contributions of both Hume and Moore are seen as having been the most important. After having presented their ideas, and expanded upon them with my own thoughts, we will be ready to understand why the *is/ought* distinction seems to spell the end for evolutionary ethics.

## Hume's Theory

To begin, I will quote the relevant paragraph from Hume's *A Treatise of Human Nature* (1740) in its entirety, as it has many points that I will refer back to in the subsequent discussion.

In every system of morality, which I have hitherto met with, I have always remarked, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surprised to find, that instead of the usual copulations of propositions, *is* and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*. This change is imperceptible; but is, however, of the last consequence. For as this *ought*, or *ought not*, expresses some new relation or affirmation, it is necessary that it should be observed and explained; and at the same time that a reason should be given, for what seems altogether inconceivable, how this new relation can be a deduction from others, which are entirely different from it [...] this small attention would [...] let us see, that the distinction of vice and virtue is not founded merely on the relations of objects, nor is perceived by reason. (Hume, 1740: part 1, sec. 1, par. 504)

There have been many interpretations of this passage, but I will focus only on the most plausible two. One interpretation potentially raises problems for my thesis. I therefore examine this interpretation first, and then proceed to the second interpretation.

The first interpretation argues that in this passage, Hume is concerned with the distinction between what is morally right to do (rationally speaking) and what one will actually decide to do in the end. In other words, Hume is arguing that there is no necessary or logical connection between a truth (say, a moral, normative truth) on the one hand, and motivating conclusions about what will be done on the other hand. For example, one might be able to show that, according to reason, slavery is wrong, but doing so does not necessarily oblige one not to practice slavery or endorse it. Therefore, the reason(s) are not sufficient to move one's will, which is to say that reason alone does not move one to moral action. Furthermore, this means that there is something more to morals than simply reason, such as, say subjective desires or unconscious biological drives, and that these factors do the heavy lifting when it comes to moral

action. Finnis (2011: 37-40) shows how this is a commendable interpretation, and ties together the main argument Hume is trying to make in this section of his book. For instance, this interpretation is corroborated by a paragraph that occurs four paragraphs before the one just quoted above,

It is one thing to know virtue, and another to conform the will to it. In order, therefore, to prove that the measures of right and wrong are eternal laws, *obligatory* on every rational mind, it is not sufficient to show the relations upon which they are founded: we must also point out the connection betwixt the relation and the will; and must prove that this connection is so necessary, that in every well-disposed mind, it must take place and have its influence [... W]e cannot prove *a priori*, that these relations [of right and wrong], if they really existed and were perceived, would be universally forcible and obligatory. (III, i, 1, par. 500)

Here is where the potential problems with this first interpretation begin to emerge.

In the last sentence, Hume fails to distinguish between “forcibly” and “obligatory.” That is, he fails to distinguish between what ought to move one’s will (i.e. morally or rationally) and what must or actually does move one’s will (i.e. causally, biologically, etc.). Hume conflates these two different questions because he is operating on the (wrongful) assumption that if objective moral truths exist, and can be determined by reason, then that should (indeed must!) be enough for us to decide to act in accordance with them. That is, if moral truths exist and can be arrived at through reason, those truths must also be somehow intrinsically motivating. However, since the ostensibly rational moral truths philosophers often present continually fail to guarantee our adherence, they must therefore not be true. Hence Hume’s skeptical conclusion, at the end of his is/ought paragraph, where he concludes that the distinction between vice and virtue is not perceived by reason.

I argue that it is a non sequitur to believe that if moral truths exist, that they therefore must motivate one to action. As such, proving that these ostensible truths do not motivate us to action does not also prove that these truths do not therefore exist. Hume rightly argues that to

know virtue (i.e. moral truth) and to act in accordance with it are two different things, but he is wrong to conclude on this basis that the validity of virtue is thereby thrown into inescapable doubt.\*

Contra Hume, in order to prove that moral truths (or what he calls “eternal laws”) can be objectively established, it is not also necessary that we show how they are “obligatory on every rational mind,” at least not in the sense that one must act in accordance with them or recognize their truth. In other words, in order to establish moral truths, it is indeed “sufficient to show the relations upon which they are founded” (i.e. the rational laws), and one need not “also point out the connection betwixt the relation and the will” because it is not “necessary that, in every well-disposed mind, it must take place and have its influence.” Therefore, the fact that “we cannot prove a priori that these relations [...] would be universally forcible and obligatory” does not present a problem for our entirely distinct aim to prove that these relations constitute eternal laws.

We see now that Hume has collapsed the difference between the moral ought and the causal ought (a mistake Richards will also make), and that this leads him to skeptical conclusions concerning the objectivity of values (which is also where Ruse will end up). However, there is a different interpretation of Hume’s passage. This is that Hume has pronounced the logical truth that no set of non-moral (or non-evaluative) statements can entail a moral (or evaluative) conclusion. In other words, any argument employed to justify a moral claim must be so constituted that a further moral claim is used in the justification (a process I will come to call oughts all the way down). Thus, arguments that claim to justify a moral conclusion based on only

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\* I leave off on fully disproving Hume’s skeptical conclusions until Part III.

factual statements are invalid, according to this line of thought. Such arguments can be made *prima facie* valid with the explicit addition of at least one moral claim.

Often, moral claims are only implicit, surreptitiously ensconced within the argument so as to appear as factual claims. For example, the moral claim that torture is wrong is not justified by the factual statement that torture causes pain, bloodshed, and the loss of life. (Even if this factual statement is undeniably true, the argument is still fallacious, as the conclusion cannot be deduced from the facts.) One can accept the factual statement while rejecting the conclusion, as many do. As Thompson (1995) points out, a further moral claim is necessary, namely that engaging in activities that result in pain, bloodshed, and loss of life is morally wrong. Recruiting this further claim brings one into the moral realm, where one is now arguing, for instance, whether or not engaging in activities that result in pain, bloodshed and loss of life is morally wrong when it is done to avoid even more pain and bloodshed, or when it is done to protect some other value, such as liberty. Thompson does well to highlight that with this shift from the descriptive to the moral realm, the controversy is no longer over facts. Nobody is disputing that torture in fact causes pain, bloodshed, and the loss of life—dispute has shifted to the moral claim about torture. The dispute has become about reasons, about justifications.

As Finnis points out, the first interpretation of Hume's famous passage may be more historically correct, more faithful to what Hume himself meant to communicate. But this in no way prohibits us from accepting this second interpretation. The truth of the logical principle within this second interpretation does not depend on whether or not Hume realized it himself, or conformed his ideas to it; its validity as an idea stands on its own. This is why I do not call the is/ought distinction Hume's Law, as it is often labeled in the literature. Calling the is/ought distinction Hume's Law inevitably conjures up thoughts of Hume (after all, his name is right

there!), which implies that Hume's own reasons or conclusions matter—neither of which is the case. We need only take from Hume the idea that deducing an *ought* from an *is* represents a logical mistake.

### Moore's Theory

That the is/ought distinction, articulated in Hume's passage, is indeed logically valid, was demonstrated by G.E. Moore in 1903, in his *Principia Ethica*. (In his discussion of the is/ought distinction, Moore also never mentions Hume, perhaps for the same reasons as me.) I feel as if I am in the hairsplitting business when I maintain that there is a difference between Hume's understanding of the is/ought distinction (or at least what has become my interpretation of Hume) and Moore's. Doubtless, they both reach the same conclusion: that arguments beginning from facts and ending in norms are suspect. And because of this similar end-point, they are often mentioned as synonymous with each other in the literature, and Hume's Law is seen as interchangeable with the naturalistic fallacy. I will nonetheless mention that whereas Hume highlights the shift from *is* to *ought* as invalid, Moore sees the process of defining *good* through natural objects as problematic. If this difference is not clear, it will become so.

Moore charged theories that defined good in terms of a natural property as having committed what he called the naturalistic fallacy (a term coined by Moore). He spoke of "Naturalistic ethics [...] theories which owe their prevalence to the supposition that 'good' can be defined by reference to a *natural object*" (Moore, 1903: 142, emphasis in original). By "natural" objects, Moore meant "any object of [...] which] it may be said to exist now, to have existed, or to be about to exist, [if we can say this] then we may know that that object is a natural object, and that nothing, of which this is not true, is a natural object". This is a bit abstract, to be

sure. Moore elaborates that what makes natural objects so is that they can be analyzed and defined. For instance, as “yellow or green or blue, as loud or soft, as round or square, as sweet or bitter, as productive of life or productive of pleasure, as willed or desired or felt” and so on (143). In sum, natural objects are “that which is the subject matter of the natural sciences and also of psychology” (143). Naturalistic ethics therefore supposes “ethics is an empirical or positive science: its conclusions could be established by means of empirical observation and induction” (142).

If natural objects are those that can be analyzed and defined, non-natural objects are those that are unanalyzable and indefinable. For Moore, good, in the moral sense, represents such a non-natural object. Furthermore, Moore sees good as the central element of ethics. The good is not definable with reference to natural or non-natural objects. Any attempt to do so commits the naturalistic fallacy or the metaphysical fallacy, respectively (141). This idea of the metaphysical fallacy, and the un-analyzability of the good with reference to non-natural objects, represents part of Moore’s thought that I do not endorse. However, I wholeheartedly agree with Moore’s conclusion that evolutionary ethics is an approach to ethics “which, strictly understood, is inconsistent with the possibility of any Ethics whatsoever” (142). This is because “what we want [from ethics] is a clear discussion of the fundamental principles [...] and a statement of the ultimate reasons why one way of acting should be considered better than another,” and evolutionary ethics “is immeasurably far from satisfying these demands” (149). Why does Moore think evolutionary ethics is doomed to fail in satisfying these demands, i.e. in supplying ultimate reasons?

Moore believed “[i]t is easy to say which of them [i.e. objects] are natural, and which of them (if any) are not natural. But when we begin to consider the *properties* of objects, then I fear

the problem is more difficult” (143, emphasis added). This is because beginning to consider the properties of objects, in an evaluative, moral sense (i.e. whether X natural object is good or not) requires switching logics of inquiry. When we switch logics of inquiry in this way, working within the confines of evolutionary ethics, we are left in a lurch, because all we have to work with are natural objects, which are insufficient. For example, asking whether a feeling, defined in terms of a mental state (i.e. a natural object), is good ipso facto shows that the good cannot be identical with the feeling. And yet, naturalistic ethics are those theories “which declare the sole good to consist in some one property of things [...] and which do so because they suppose that ‘good’ itself can be defined with reference to such a property” (148).

To make this all a bit clearer, this is the point: regardless of what natural property is used to define good, “[i]t will always remain pertinent to ask whether the feeling itself is good” (144). Thompson calls this Moore’s “open question” argument (1995: 22-23). Thompson asks us to consider that good is defined in terms of happiness. Further, suppose that happiness is defined in terms of a state of mind, say, as the right mix of oxytocin and dopamine for our neural receptors. It would then be possible to determine if a certain person at a certain time is happy, as we could stick them in an fMRI. But after we have determined that he or she is happy, it would still be meaningful to ask if it is good that he or she is happy. If good, however, is defined in terms of happiness, such a question is nonsensical. This leaves us with two options. First, we could conclude that such a question is indeed nonsensical. Or second, we could conclude that such a definition of ‘good’ has made a reasonable question appear irrational, which should cast doubt on such a definition. I propose the second option is the more sound. This begins to show, though at an abstract level, why evolutionary ethics will always be “open ended” in this sense, unable to provide ultimate reasons. The next chapter will show more concretely that this is the case.

In sum, naturalistic ethics is “a particular method of approaching ethics [... which] consists in substituting for ‘good’ some one property of a natural object or of a collection of natural objects” (Moore, 1903: 143). Moore’s understanding of the is/ought distinction involves an understanding of good as a non-natural, unanalyzable object, which is a view absent from Hume’s and my own thoughts on the topic. However, despite this difference, we all share the same conclusion concerning the is/ought distinction with regards to evolutionary ethics: empirical facts alone cannot justify ethical claims. Attempting to do so means replacing ethics with one of the natural sciences, which is Ruse’s aim (he favors EP). Apparently, in doing so, Ruse is not being so original, as Moore wrote over a century ago: “In general the science thus substituted [for ethics] is one of the sciences especially concerned with man [... i]n general psychology has been the science substituted” (142).\*

#### Final Elaborations on the Is/Ought Distinction

As will be seen, this substitution of ethics with the empirical science of EP is exactly what evolutionary ethicists mistakenly attempt, thereby evacuating the role of justification or reasons from ethics. To attempt to give ethics a biological foundation, or to think doing so is even possible—both of which Ruse and others do—is to misunderstand ethics. I will show that Moore’s critique of such attempts holds strong. That said, similar to the case with Hume, in borrowing Moore’s critique I do not mean to also burden myself with his subsequent ideas on ethical inquiry. I take only his idea of the naturalistic fallacy.

This is why I do not equate the is/ought distinction with the naturalistic fallacy, because the naturalistic fallacy applies only to attempts to proceed directly from a fact to a norm, while

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\* Then again, I am not being original either in my criticisms against Ruse. Clearly, originality is overrated!

the is/ought distinction also applies to attempts to show how the facts ostensibly prove that there are no norms (which is also a mistaken idea). Furthermore, the naturalistic fallacy is sometimes also mistakenly equated in the literature with the belief that whatever is natural, whatever that might mean, is therefore also good, just, or right. If it is not already clear, it will become evident that proceeding from facts to norms need not always take such a straightforward approach—but it is mistaken all the same.

I will here quickly examine one famous attempt to disprove the is/ought distinction. I mention it in this section because this attempt does not recruit the weight of evolutionary theory to its cause (as those I will explore below do), but operates on a more abstract level. Nevertheless, its failure highlights for us the manner in which evolutionary accounts will also fall short. John Searle, in his book *Speech Acts* (1969), believes he shows how a moral claim is justified by facts alone:

1. Jones uttered the words, “I hereby promise to pay you, Smith, five dollars”
2. Jones promised to pay Smith five dollars.
3. Jones placed himself under (undertook) an obligation to pay Smith five dollars.
4. Jones is under an obligation to pay Smith five dollars.
5. Jones ought to pay Smith five dollars.

This procession from facts (1-4) to a moral claim (5), only works within what we call the institution of promise making. Searle is aware that this is the case, but thinks it is irrelevant to his successfully disproving the is/ought distinction. However, if one denies that promise making entails an obligation, or that one should fulfill one’s obligations, this throws the validity of 5 into doubt. In order to raise this objection, one must step outside the institution of promise making.

Once one steps outside the institution, not only do statements 1-4 appear as descriptive

statements, but 5 also constitutes a descriptive claim: it describes what is the case within the institution, according to its rules. Thus, only a factual claim has been deduced from other factual claims. As such, the is/ought distinction has not been overcome.

This is the central objection adopted by John Mackie in *Ethics: Inventing Right and Wrong* (1977). Mackie contends that analyzing the argument from within the institution places special constraints on the assessment of the argument. These constraints constitute a “special logic” where the argument’s validity depends on moving in and out of the institution of promise making in order to conjure the appearance of a genuine counterfactual to the is/ought distinction. As Mackie concludes, “no-one who is concerned for the spirit rather than the letter of Hume’s Law need be worried about a derivation of this sort” (1977: 48). This casuistry will be seen to reflect similar attempts to overcome the is/ought distinction in evolutionary ethics.

Before I turn to show the consequences of the is/ought distinction for evolutionary ethics, by applying it to different proposals, one last matter of significance must be discussed. The is/ought distinction is sometimes referred to in the literature as the is/ought gap. I will never refer to the is/ought distinction as a gap, and my decision to do so is an important semantic preference. I will begin explaining the reason behind this preference by noting something that both Hume and Moore bring to our attention: that statements of *is* and *ought* are always found alongside each other. Hume’s prose nicely describes the common occurrence of the imperceptible change between *is* and *ought* statements. Hume was an observant man, but as I said above, when this shift happens in the EP literature, as it often does, most of us are like to go on nodding our heads, never realizing that something “altogether inconceivable” and “of the last consequence” has occurred. There are two main reasons that account for our failure to realize this shift when it happens.

The first reason is that it is often the case that the moral claim hidden amongst the factual premises of an argument is so widely accepted that explicitly fleshing it out can seem not only ridiculous, but unnecessary. Who does not recognize the value of social stability? Or the wrongness of suffering? The importance of truth-telling? Is it not pointless therefore to keep mentioning all the points upon which most people would agree, and instead focus attention on the objects of heated disagreement? (Of course, I have no way of knowing if this noble sentiment is really behind the mistakes of those who make them.) The answer is no! Wide acceptance of a moral claim does not obviate the need for a reference to it in a complete, formal argument (Thompson, 1995: 22). Without such an explicit reference, the conclusion does not follow from the factual claims, despite all the head nodding!\*

The second reason why we often fail to realize the shift from *is* to *ought* statements is because it is not uncommon for *is* and *ought* statements to be closely linked to each other. Furthermore, it can be completely legitimate that they are closely linked and presented as inextricably connected. At the same time, however, as Hume said, *is* and *ought* statements are “entirely different” from one another.

This is why I do not call the *is/ought* distinction the *is/ought* gap, because calling it a gap encourages the common misconception that the *is/ought* distinction means that facts and norms have nothing to do with each other, or that norms do not depend on facts. This in turn encourages the common misconception that philosophy (or ethics) does not, and need not, pay attention to all the interesting facts revealed by science. Neither of these is the case; thinking so represents an incorrect understanding of the *is/ought* distinction.

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\* And besides, once the moral claim is actually fleshed out, the argument can sometimes appear ridiculous.

This widely held mistake was recently given voice by the historian of science Michael Shermer, in a submission of his to *Edge* magazine, where he says, “The is-ought problem (sometimes called the naturalistic fallacy) is itself a fallacy. Morals and values *must* be based on the way things are in order to establish the best conditions for human flourishing” (2013, emphasis original). Each of Shermer’s two sentences houses a mistake. First, and less importantly, he has equated the is/ought distinction with the naturalistic fallacy (this conflation is common, and most often harmless). Second, he believes the is/ought distinction means that values cannot be based on the way things are. What else would they be based on?\* Facts and values will always be closely intertwined. But how can this be so? Have I not contradicted myself by saying that *is* and *ought* statements are inextricably connected to each other while also maintaining that they are entirely different from each other? This paradox is easily resolved.

Facts and norms are inextricably connected. Of course norms are based on, and use, facts. Facts and norms thus go together. The point is that norms are not merely deduced from facts, nor reducible to facts. As Hume says, norms establish “a new relation or affirmation,” and this prescription cannot be simply deduced from the facts. Rather, “a reason should be given.” And here we have the crux of the is/ought distinction: that facts and norms play radically different roles, despite both contributing to value concepts. A fact explains or describes how the world *is*. A norm gives you a reason for believing or acting in accordance with a certain value. In a sense, there is no such thing as a prescriptive fact.

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\* As will be shown below, in our discussion of the ethical realm, part of the problem is that we think “the way things are” must equal “scientific facts.” Due to our biological and material bias, we fail to realize how rational laws, while not being the same as scientific facts, can equally reveal “the way things are.”

For example, the descriptive fact that innocent people scream out in pain when physically tortured does not in itself entail the prescriptive conclusion that innocent people ought not to be tortured. In order to reach such a conclusion, it is necessary that one has accepted moral arguments that torture, and especially of innocents, is not a good thing to do. The prescriptive conclusion that torture is not good cannot be established by facts to do with pain, social consequences, and the like (though these might be part of the general argument to why torture is not good). At the end of the day, the belief that torture is not good is a moral belief, resting upon moral arguments, established by reason. The logical implication of this is that the empirical sciences can never unearth values. Facts do not verify values, at best facts may illuminate values; facts cannot found values, facts can only elaborate values.

### *Conclusion*

In sum, there is nothing wrong with facts and norms being closely linked, and both used to make an argument. That is the way it should be. However, it is important to realize that even though facts and norms are closely linked, they are playing radically different roles. It is only a norm that can actually give one a moral reason to act in a certain way (regardless of whether or not one actually choose to act in accordance with that norm). A fact can never play the role of a norm. Furthermore, a norm cannot be reduced to a fact, as norms ultimately rely on moral arguments, (i.e. other norms—oughts all the way down). This distinction between facts and norms is what dooms EP's normative project of evolutionary ethics, a contradiction in terms. If the above has been exceedingly abstract, I will now illuminate the concepts with my discussion of evolutionary ethics' substantiating endeavor. If the above discussion has seemed exceedingly drawn out, this is because in-depth discussion the is/ought distinction is all too often brushed off

in the literature of evolutionary ethics, much to its own detriment. I have been addressing this dearth.

## **Chapter Three: The Substantiators**

### *Introduction*

This chapter examines the first prong of EP's double-pronged attempt to pierce the ethical realm: EP's attempt to substantiate ethics. By EP's attempt to substantiate ethics I mean how EP tries to show how an understanding of the underlying biological basis of morality adds weight to our otherwise unfounded ethical concepts. Substantiators are concerned with the foundation of values. In an attempt to save values from being otherwise supposedly based on subjective preferences, they aim to give values an objective, i.e. naturalistic, basis. The irony is that substantiators end up basing values upon values, which is the only possibility. However, because they took the route of a naturalistic justification, all of their arguments are fallacious. In order to prove the shortcomings of the substantiators, I never use an external critique. Rather, I work within their own framework, showing how, based on their own logic, their arguments fail. The way in which their arguments fail points in the direction of the remedy: a value-based—rather than empirically based—approach to, and founding of, ethics.

The substantiating approach is the most straightforward means for EP to achieve normative significance. Though this substantiating strategy was once the most common approach for evolutionary ethics, few evolutionary ethicists attempt it today (the skeptical approach is much more popular). The substantiators and I share one similarity: we both share the conviction that our moral beliefs can be justified as objectively true. The key difference is that they believe our biology plays a role in this justification process, whereas I do not. All that has to be done in order to draw their views into question is to show that they fail to avoid the consequences of the is/ought distinction, which is the test they set for themselves!

### *Early Evolutionary Ethics*

Having briefly mentioned—without dwelling on—evolutionary theory’s early forays down dark alleys, such as eugenics policies, I will now do the same with early evolutionary ethics. I have highlighted 1859 as changing the way we think about humans. Many thinkers did not wait for Darwin himself to make the apparent connections in 1871, and right from the publication of the *Origins*, thinkers have been linking evolutionary theory to ethics.

The figure of Hebert Spencer looms large as a warning to all of the simplistic ways in which evolutionary theory can be used by philosophy. Spencer’s contention that evolution, “while it shews us the direction in which we develop, therefore shews us the direction we ought to develop” is seen as being in blatant disregard of the naturalistic fallacy (i.e. the is/ought distinction), as laid out by Moore (Moore, 1903: 42). Moore’s scathing critique of Spencer seemed to put the final nail in the coffin of evolutionary ethics. Subsequent attempts to appeal to evolution in order to illuminate ethics, such as by Haekel in the 1900s, Julian Huxley in the 1940’s, or C.H. Waddington in the 1960s, seemed more like walking corpses than genuine contributions to ethical inquiry.

This all changed in 1975, with Wilson’s *Sociobiology*. Interest in the possibility of evolutionary ethics was reawakened, and the endeavor has only intensified since. What was the difference from earlier attempts, which gave these practitioners of a once-buried project such confidence in its viability? The quick answer is the impressive advancements that had been made, and continue today, in the relevant fields of genetics, neuroscience, ethology, and the like. With such an accurate understanding of the inner workings of the human mind and body, how could the endeavor of evolutionary ethics fail this time? I argue that though the science is

commendable, and important in the descriptive realm, the philosophy behind contemporary evolutionary ethics is just as sloppy as it ever was.

With such a brief view of evolutionary ethics' early history and development, I turn my attention to the contemporary plane. Doing so is justified (and necessary, due to the constraints of this thesis). Note that even Ruse, an ardent proponent of evolutionary ethics, commenting on this early history, states, "Evolutionary ethics is a subject with a deservedly bad reputation" (1993: 133). Although there have been interesting attempts to depict the early history of evolutionary ethics in a more sympathetic light (see, for example Richards' *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*), I am uninterested in such (re)interpretations. Rather, to borrow a phrase from Ruse, I am interested in this phoenix risen anew out of the ashes: contemporary evolutionary ethics.

### *Contemporary Evolutionary Ethics*

The contemporary field of evolutionary ethics displays many scholars, from a wide array of disciplines. Those who believe that EP's findings can substantiate ethics all share at least two similarities. First, they recognize the problem of the is/ought distinction. Second, they believe it can be overcome. (I would say a third similarity is all substantiators believe in the possibility of moral truths. However, as is the case with Churchland, they do not all come out and say that, despite the fact their work paves the way for, and seems to be based on, that belief.) To avoid being repetitive, I will only examine three contemporary attempts to overcome the is/ought distinction. The viability of evolutionary ethics depends on the possibility of somehow overcoming the is/ought distinction, which I believe is impossible; there are different ways to try to get around the problem, but they all come up short. To paraphrase Leo Tolstoy's famous first

sentence in *Ana Karenina*, all particular evolutionary ethics fail for the same reason, but they all fail in their own way. Together, the four authors I have chosen (co-authors in one case) share the dubious honour of representing all the ways so far conceived to try to skirt the consequences of the is/ought distinction. Once we are familiar with these three, we are essentially familiar with them all. Lastly, my choice of authors is surprisingly restricted, since many in this field attempt to skirt the is/ought distinction by not even mentioning it! Even several of those who do mention it, do so in passing, presenting it as a very old idea once held by dusty philosophers who had the misfortune to have lived and died long before the invention of fMRI machines. The failure of the substantiators' to take the is/ought distinction as seriously as it deserves, and to understand its implications, dooms their enterprise.

### Patricia Churchland

I begin with an exploration of Patricia Churchland's thoughts on the role EP has to play in ethics, and the significance of the is/ought distinction. Churchland, though officially trained as a philosopher, has become what is now known as a neuro-philosopher, and is a respected voice in this new field. In her book, *Braintrust: What neuroscience tells us about morality*, she aims to address that portion of "contemporary moral philosophy [which is] in peril of floating on a sea of mere, albeit confident, opinion," but which has "no strong connection to evolution or to the brain" (Churchland, 2011: 2). According to Churchland, "[t]o move beyond the broad hunches about our nature, we need something solid to attach [moral] claims to" (3). For her, this something solid is to be found in the "real data from evolutionary biology, neuroscience, and genetics" (3). This is because "evidence should trump armchair reflection" (4).

I will highlight two elements of Churchland's project, as she sets it out in the early pages of her book. First, if Churchland is restricting her comments to the descriptive realm, then she has my agreement. EP, operating in the descriptive realm, has many important insights to offer moral philosophers, as I have argued in Part I. Philosophers who make factual claims about, for instance, the process of moral intuition, which are inconsistent with our current knowledge of how the brain works, deserve to be derided, as Churchland is evidently enjoying. However, Churchland is not restricting her comments to the descriptive realm, and this leads to my second point.

Since Churchland wishes to leave the descriptive realm, and enter the ethical, the central issue becomes: what counts as "evidence"? Is the real data of the empirical sciences sufficient evidence for the ethical realm, as Churchland believes? Or is the evidence of the ethical realm indeed the product of armchair speculation, i.e. reason (as I will argue)? This question of what counts as evidence depends on the deeper question of the consequences of the is/ought distinction. Churchland is aware of this, and also addresses it at the beginning of her book. Unfortunately, in her treatment of the is/ought distinction, she makes many of the mistakes I outlined above.

Churchland begins, as did I, with the thoughts of Hume. She gives predominance to the interpretation that "Hume made his comment in the context of ridiculing the conviction that reason [...] is the watershed for morality" (5). She concludes that Hume "was every inch a naturalist," and thus on her side of the debate (5). This is a perfect example of why I decided not to call the is/ought distinction Hume's Law. Doing so encourages leaning on the person of Hume, instead of supporting oneself with the actual ideas at hand. Churchland has entirely avoided the important question. Nobody is interested in what side of the debate Hume is on.

Rather, we want to know which side is correct. As I have shown, the much more plausible side happens to be the opposite side of Hume, and its validity is not threatened by this fact. Thus, Churchland has not overcome the is/ought distinction. She has merely shown that Hume may have misunderstood it.

But Churchland is not done yet. She continues by saying that what Hume was really worried about was “mak[ing] it clear that the sophisticated naturalist has no truck with simple, sloppy inferences going from *what is* to *what ought to be*” (5, emphasis in original). As an illustration of the “dimwitted inferences between descriptions and prescriptions” that Hume was wary of, as they aimed to preserve the elite, Churchland offers the following example: “Husbands are stronger than their wives, so wives ought to obey their husbands”. Churchland correctly sees such inferences as “stupid,” and “precisely because Hume was a naturalist, he wanted to dissociate himself from them and their stupidity” (5). Again, this is a perfect example of how the is/ought distinction is often conflated with the most straight forward approach of the naturalistic fallacy. Since everyone can recognize the error in proceeding from prescriptions to descriptions in this sophomoric form, we need only point out that our inferences will not be so straightforward, and this overcomes the problem. Or so evolutionary ethicists would like to believe. I have shown how the is/ought distinction reaches further than just the “natural equals good” doctrine.

We now arrive at Churchland’s last stab at the is/ought distinction. She points out that going from an *is* to an *ought* is not a big deal, we do it all the time. Observe: “I have a horrendous toothache? I ought to see a dentist. There is a fire on the stove? I ought to throw baking soda on it. The bear is on my path? I ought to walk quietly, humming to myself, in the orthogonal direction” (7). One must resist the temptation to nod one’s head!

Churchland has not gone from an *is* to an *ought* at all. Rather, she has gone from an *ought* to an *ought*. This is because Churchland's inferences, in each case, rest upon implicit value assumptions that have not been fleshed out. As I showed above, this often happens because the value assumptions are so widely accepted that fleshing them out seems redundant. For example, that one ought to take steps to alleviate tooth-pains, that one ought to ensure their house does not burn down, that one ought not to wrestle with wild bears. Churchland has ignored the fact that these value claims, none of which are factual, are what underwrite her inferences. My point is not that the implicit value assumptions in this case are wrong, although they may be. Rather, my point is that, whether or not they are true, they are doing the heavy lifting, revealing that Churchland has only gone from an ought to an ought. In other words, the is/ought distinction has not been overcome.

I have shown that Churchland's perfunctory treatment of the is/ought distinction has failed to overcome it. That is, she has failed to provide any reason to suppose that all the information that is to follow in her book should have any bearing at all on our understanding of ethics proper. Her interesting analysis of the role of oxytocin in morality, which is the main argument pervading the book, now seems just that: interesting. It might have sated my curiosity on the topic, but it does not appear to be relevant to ethics. One cannot help but be reminded of Moore's point concerning the open-endedness of evolutionary ethics. Churchland asserts that oxytocin is vital in a mother's love for her child. OK, so what?\*

Churchland concludes her three-page discussion of the is/ought distinction thusly: "The important point for my project, therefore, is straightforward: that you cannot *derive an ought*

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\* My dismissive criticism of Churchland only applies insofar as she aspires her findings to have any direct normative import whatsoever. She never explicitly says so, but it is certainly implied by her taking on the is/ought distinction.

from an *is* has very little bearing so far as in-the-world problem solving is concerned” (7, emphasis in original). I must confess that even after a careful rereading of Churchland’s argument, I still find it difficult to understand exactly what she means by this statement. Apparently, it is supposed to end discussion on the pesky problem of the is/ought distinction, since the question is not mentioned again in the next two-hundred pages. She is correct that the outcome of the is/ought distinction is the “important point for my [i.e. her] project”. Unfortunately, that outcome is not as “straightforward” as Churchland wants it to be.

With regards to her “in-the-world problem solving” comment, I believe this is put in context when juxtaposed with Churchland’s caricatured description of philosophy as founded on “some rarified, unrealistic concept of reason” (6). When I discuss the ethical realm, Churchland’s caricature of reason collapses. It may be unrealistic to expect the layman to realize that what he considers a fact (eg: pain is bad) is actually a value judgment, and that the way he goes about his every-day decision making process is logically flawed. However, this does not mean reason is “unrealistic” or disconnected from “in-the-world” problems. The fact of the matter is that Churchland has failed to show how to derive an *ought* from an *is* because doing so is impossible. Misunderstanding the consequences of the is/ought distinction fundamentally changes how we understand ourselves, and our relationship to the world, in light of all the interesting facts revealed by EP and its sisters. Against Churchland, I instead ask, what could possibly have more bearing on our lives?

I close my examination of Churchland by noting that after a careful reading, it is not perfectly clear that she is actually trying to substantiate ethics per se. That is, it is not clear that she believes her account of the neuroscience behind moral cognition actually helps us towards justifying the content of moral thought. There is no sentence where she explicitly comes out

either as a substantiator or a skeptic. On the question of the possibility of objective moral truths, she is silent. That said, I believe she correctly belongs in this section, as the spirit of her work of tying ethics to neuroscience is done, according to her, for the benefit of ethics. Thus, she does not seem to be a skeptic, and is more plausibly interpreted as trying to give an account of how EP substantiates ethics.

### Robert Richards

I now turn to Robert J. Richards' presentation of evolutionary ethics. If there is some ambiguity concerning Churchland, there is no mistaking the thrust of Richards' argument. In his article, "Birth, Death, and Resurrection of Evolutionary Ethics," Richards distances himself from early evolutionary ethicists, and also from contemporary, skeptical evolutionary ethicists. As Richards says, "I differ from Ruse in believing that we can morally justify a system founded on evolution—we can coherently and reasonably derive moral values from facts" (1993: 120).<sup>\*</sup> After positioning himself in the field, Richards sets out his aims: "I want to show that there is no general fallacy in arguing from facts to values, from 'is's to 'ought's, though one can, indeed, argue fallaciously in attempting to derive moral propositions from statements of evolutionary facts" (116). Further, "I wish to emphasize what the naturalistic fallacy forces us to recognize, namely, the crucial requirement of justification" (116). Richards seems to be aware of the challenges he faces, but is he up to the task?

At a structural level, Richards' approach to the project of evolutionary ethics resembles my own. That is, he bifurcates the project of evolutionary ethics. "First, there is a speculative theory of human nature, based on current anthropological and biosocial studies, as well as on the

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<sup>\*</sup> I agree with Richards' assessment that Ruse's ideas logically lead to nihilism, as I will show.

systematic requirements of general evolutionary theory” (120). This is what I have called EP in the descriptive realm. “The second part is a moral theory designed to rest on the presumptively secure foundations of the evolutionary theory” (120). This is what I call EP as a normative project, and I believe it is impossible. Richards and I disagree because he believes that “an ethics based on the presumed facts of biological evolution need admit no logical flaws and need not collapse because facts cannot support imperatives, but rather such an ethics can be justified by using those facts and the theory articulating them” (121). If I am correct, then Richards must commit conceptual errors. And indeed he commits many, and collapse his theory does.

Richards realizes, as did Churchland, that the question of the is/ought distinction is crucial. Richards characterizes the is/ought distinction as “the one kind of objection generally thought to be fatal to any Darwinizing in morals” (126). After a brief discussion of how one moves from premises to conclusions in a syllogism, Richards proceeds to show how one might move from factual premises to evaluative conclusions. He proposes the following example: ““The Bible says fornication is wrong; but fornication is sex outside of marriage. Therefore premarital sex ought not to be engaged in”” (126). Richards realizes that the validity of this argument depends on the acceptance of the meta-moral rule that behavior condemned in the Bible ought not to be done, (recall Searle’s attempt to overcome the is/ought distinction within the institution of promising). Richards concludes that “[w]e have just seen how normative conclusions may be drawn from factual premises” (126). But, similar to Churchland, he has only shown how an ought is derived from an ought.

That said, Richards digs deeper than both Searle or Churchland did. Richards understands that if one rejects the meta-moral rule, “then the problem of justification becomes the framework issue of what justifies the inference rule?” (126). Resolving such a dispute requires stepping

outside of the framework, and “when philosophers take this step, they typically begin to appeal (and ultimately must) to common-sense moral judgments” (126). That is, moral philosophers construct test cases for our moral judgments, in order to see if the end results match commonly held moral intuitions, and why or why not. I whole-heartedly agree with Richards’ assessment of the process of ethical inquiry for resolving the kind of conceptual questions the is/ought distinction leads to with evolutionary ethics. But here is where I believe Richards goes wrong.

According to him, such thought experiments, in appealing to moral intuitions, are essentially empirical exercises. How so? As Richards sees it, “According to this understanding of the concept of justification, the justification of meta-moral inference rules must ultimately lead to an appeal to the beliefs and practices of men, which, of course, is an empirical appeal” (127). Richards believes that this shows that “moral principles ultimately can be justified only by facts” (127). For Richards, this strategy of appealing to facts is a necessity because “no system can justify its own first principles” (127). Ergo, “[t]he first principles of an ethical system can be justified only by appeal to another kind of discourse, an appeal in which factual evidence about common sentiments and beliefs is adduced” (127). Thus, in conclusion, “[t]he rebuttal, then, to the charge that at some level evolutionary ethics must attempt to derive its norms from facts is simply that every ethical system must” (127). There are some conceptual errors here.

Richards’ fundamental mistake is purporting that ethical inquiry is essentially an empirical enterprise simply because it utilizes empirical evidence. Recall how I said that the is/ought distinction does not mean that facts and norms will not often be tightly bound together in moral arguments. The point is that facts and norms play different roles. Just because they appear tightly fused, does not mean they are reducible to each other. Similarly, just because ethical inquiry utilizes the matter-of-fact beliefs and practices of men, does not mean, therefore,

that ethics is being derived from facts. If only Richards had substituted *the beliefs and practices* of men with *reason*, then his argument would have been saved. This is because it is *reason*, which ostensibly underlies the beliefs and practices of men, that accounts for them being appealed to in the first place. Substituting in reason would have shown Richards that ethical inquiry is not simply an empirical enterprise, since torturing babies for fun would still be morally wrong even if at the end of a fact-finding mission you could not find one person who agreed with its wrongness. It is reason, i.e. moral justification, that ethics is interested in. Ethics is interested in the facts of common sentiments and beliefs only insofar as they provide a conduit for these reasoned moral justifications.

Richards is also confused with his talk of first principles. For starters, I have shown how it is impossible for facts to constitute first principles for an ethical system. Ethics is all about telling one what one ought to do, and there is no such thing as a fact that does this, without being supported by a value assumption (although Richards believes evolutionary theory gives us a fact that does do this, as shown below).

Secondly, Richards is wrong in supposing that ethics, properly understood, even has first principles. As I will show, there is no non-moral foothold when it comes to making moral claims in the ethical realm. As such, there is simply no such thing as an “appeal to another kind of discourse” in order to validate ethical principles. This is what I mean by oughts all the way down, that the ethical realm is one big circle, where every moral claim can only be justified by a further moral claim—there is no starting point. It will be shown in Part III how this is not a vicious circle.

Having laid out these criticisms of Richards’ approach, I will give him a last chance to save his argument. What is the factual first principle from which his evolutionary ethics gets it

justification? Richards says that his evolutionary ethics “stipulates that the community welfare is the highest good” (127). He asserts that evolutionary theory shows how “evolution has equipped humans with a number of social instincts, such as the need to protect offspring, to provide for the general well-being of members of the community (including oneself), to defend the hopeless against aggression” and other dispositions that make a “moral creature” (127). These “[p]articular moral maxims, these constitutionally embedded directives, are instances of the supreme principle of heeding the community welfare” (127). Thus, Richards’ evolutionary ethic “would be justified by an individual’s showing that, all things considered, following such maxims would contribute to the community welfare” (127). Again, I have many problems with this.

For starters, Richards has explicitly tied the validity of his moral project to the science it is based upon. Following the above explication of the role of community welfare in his evolutionary ethic, he says, “I want to remind you that I will attempt to justify the [...] moral system under the supposition that it correctly accounts for all the relevant biological facts” (127). In this case, this is problematic, since the scientific dispute over whether evolution aims at the good of the community, the good of the individual, or the good of the gene, is far from settled (and the latter seems to have the most reason on its side, see e.g. Dawkins). Therefore, the validity of Richard’s moral system seems precariously placed, since it depends on the outcome of an ongoing empirical dispute. Richards might save himself by saying the outcome of this particular dispute is irrelevant to the moral system he has built, since whether evolution works according to group, individual, or gene selection, the macro-outcome is the same, i.e. the good of the whole community. However, such an attempted escape on Richard’s part has two problems. First, it is not at all clear that if natural selection works according to the gene that the outcome of

this process is always in the community's best interest (although it may be the case that the two unite). But even if we grant that the outcome is always in the community's interest, thereby divorcing Richards from the facts he is so eager to be wed to, there would still be a disconnect between the science and his morality. This is because he has told us his morality is not consequentialist, and that it is the motives that matter (123, 130).

Furthermore, how can Richards possibly show that we *ought* to act so as to further the community welfare? He has shown that evolution has constituted us in such a way so that we feel that furthering the community's interests is generally a good thing, which we ought, therefore, to do. But he has not given us a reason as to why we ought to do it. Rather, he has only made *is* statements about where our *ought* statements come from. To do so is not to contribute to ethics proper; a theory about morality is not the same thing as a moral theory. Again, we are reminded of Moore's open-ended argument when it comes to evolutionary ethics.

Richards believes he can close this open-endedness. That is, he believes he can show why one ought to act in accordance with the evolutionary facts, thereby deriving a moral conclusion from them. However, the roundabout way in which he goes about trying to do this falls prey to the same fallacious reasoning as Hume did at the end of the second of the two passages quoted above: Richards conflates the moral ought with the causal ought. I will show how this is the case.

Richards asks us to consider the example of an elderly woman trying to cross the street at rush-hour, when Joe, an altruistic fellow, appears on the scene. The argument goes: "Joe is extremely altruistic. He sees the lady in distress. Therefore, he ought to act altruistically and help her across" (128). Since Joe being altruistic and the old lady being in distress are both factual claims, the moral conclusion that Joe ought to help has been derived from the facts of the matter.

Richards sums up: “Joe is enmeshed in the causal matrix of evolution, which instilled in him altruistic motives; therefore, he ought to act in an altruistic fashion” (128).

Richards has shown us that evolution has constituted individuals so as to act for the community good, and to endorse and applaud such action in others. Therefore, when he says that, because of the altruistic sentiments given to us by evolution, we ought to act altruistically he is not making a moral claim, but a causal claim. That is, what Richards is actually saying is that, given our biological evolution, it seems likely that we will behave altruistically in certain situations. When fleshed out in this way, we see clearly what Richards has done—and what he has failed to do!

What I find most surprising is that Richards himself is aware that he has resorted to using the causal ought instead of the moral ought. Indeed, he even compares his argument about Joe with the argument, “Carbon dioxide is building up in the atmosphere; carbon dioxide molecules reflect back heat to the surface; therefore, world temperatures ought to rise” (128). Obviously, Richards does not mean to make a moral claim with this argument. But then what makes this use of the causal ought non-moral, while the use of the causal ought with Joe is supposedly a moral claim? Richards answers that “What makes the conclusion a moral-ought conclusion is that the structured context from which it is derived is that of the evolution of altruism” (129). But this answer does not save Richards, because the moral worth of altruistic acts is exactly what he was trying to prove in the first place, so it is impossible that altruism is the source from which this moral worth is derived. That Richards is indeed trapped in a vicious circle is revealed by his contention that, “The ‘ought’ derived from the structured context of human evolutionary formation, then, will be a moral ought precisely because the activities of promoting the community good and of approving altruistic behavior constitute what we mean by being moral”

(129). Richards thus seems to be missing the point that we were not looking for an account of what we believe morality to be. Rather, we were looking for a justification for why “moral” behavior is something we ought to do. Richards has not delivered the promised goods.

Coherently presenting a moral justification for behavior was the task Richards set for his evolutionary ethic. He believed that doing so was possible because the is/ought distinction could be overcome. At the end of his endeavor, he states, “I have gone from a factual premise about evolution to an ought proposition, without, I believe, any fallacy” (129). However, I have shown that there are no shortage of fallacies to choose from in Richards’ evolutionary ethic. In his attempt to overcome the is/ought distinction, Richards has had to resort to word play, circular reasoning, and mischaracterization of the process of ethical inquiry.

### Rottschaefter and Martinsen

I now examine the attempt of William A. Rottschaefter and David Martinsen (R&M) to overcome the is/ought distinction in order to provide an evolutionary ethic. R&M take issue with the fact that “Ruse contends that Darwinian meta-ethics can explain moral sentiments, but cannot justify them” (R&M, 1990: 166). They see Ruse’s skeptical conclusions as “completely unwarranted,” believing instead “that the Darwinian principles can provide genuine, though limited, justifications for moral sentiments and the principles based on them” (165). R&M’s approach “takes seriously the results of our best scientific theories for the resolution of meta-ethical questions” and promotes “the central role that evolutionary biology” must play. At the same time, they also take seriously the naturalistic fallacy, identifying it as “the nemesis of all traditional evolutionary ethics” (150). But they are confident that “a Darwinian meta-ethics can maintain both the objectivity of values and the possibility of a naturalistic justification of

morality without committing the naturalistic fallacy” (151). How, then, do they (mis)understand the naturalistic fallacy?

According to R&M, the naturalistic fallacy “prohibits the definition of moral properties in terms of natural properties” (161). In other words, “the point of the Humean and Moorean injunctions [...] is an anti-reductionist one: moral properties ought not to be reduced to non-moral properties” (161). Is there a problem with this interpretation of the is/ought distinction? Yes. It will be recalled that I did not simply end my exploration of the consequences of the is/ought distinction with a discussion of Hume and Moore. I expanded upon them. One of the things I elaborated was that the is/ought distinction shows that facts and norms play different roles; only norms give one a reason to do (or not to do) something. What R&M’s definition of the is/ought distinction fails to grasp is that a fact cannot be prescriptive unless it is actually supported by an underlying value. Thus, their saying (correctly) that norms cannot be reduced to facts is only part of the point. The other part of the point is that facts cannot play the role of norms, they cannot give us reasons to do something. A norm cannot be reduced to a fact, and a fact cannot assume the role of a norm. It will be seen what problems this leads to for their endeavor.

“What, then, is the moral realm according to our account? And how can the [biologically evolved] moral sentiments be called morally good?” (162). R&M answer their own question by presenting morality as “genetically in-built cognitive, motivational and behavioral tendencies, which, as adaptations, produce fitness and survival and reproduction” (163).<sup>\*</sup> Further, “it is in part by means of [these] moral sentiments that humans discover the properties of things and

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<sup>\*</sup> R&M are not biological determinists, and recognize the important role of culture, though they sideline it.

states of affairs that promote their biological—and moral—ends and are motivated by the recognition of their value to possess these things and bring about these states of affairs” (163).

In other words, morality, at some level, is a biological adaptation that often furthers survival. Since our evolved mind influences what we find to be good, and moral sentiments are part of this mind, we often identify as morally good many of those same things that promote our biological survival. The reader will notice that this is simply an *is* statement about our *oughts*. R&M are also aware that they have not yet given a justification for why this process can actually be considered morally good, and that they must go further.

In order to do so, they bifurcate morality. They distinguish “moral attributes of a person” from “adaptations, [i.e.] the traits that promote human fitness” (163). The difference is that the moral attributes of a person “are achieved by the conscious, free activity of the person” while adaptation “is the result of genetic variation and natural selection” (163). This strikes me as a particularly prescient understanding of the distinction between these two approaches to morality (alas, it proves all too fleeting in their overall analysis). This characterization of morality reflects the understanding of morality I later propose in this thesis, which I believe, correctly understood, entails the irrelevance of biological answers for ethical questions. Indeed, R&M seem to almost reach this conclusion themselves, when they claim that,

We have adopted a non-reductionist account of the moral realm, *according to which the moral properties of persons and things, moral rightness and goodness, are distinct from natural non-moral properties* because they supervene on the latter. So the justificatory principles we appeal to can support basic substantive moral principles in a non-fallacious manner because these principles *are themselves moral principles*. We derive *oughts from oughts and values from values*, and postulate that among basic human values is the value of human fitness leading to survival and reproduction. On that basis we argue that the activities toward which the moral sentiments as fitness-inducing adaptations incline us can often be morally justified. (166, emphasis added).

This is close to my own views, and I find nothing in the above passage that I cannot accept. It is difficult, however, to reconcile this passage with the rest of their article. If this passage is taken seriously, it shows not only why evolutionary ethics is pointless (i.e., because moral rightness and goodness are distinct from natural non-moral principles), but also why it is impossible (i.e. because oughts come from oughts and values from values). However, R&M are possessed by their desire to link biology to the moral realm. They have essentially shown how “the activities toward which the moral sentiments as fitness-inducing adaptations incline us can” be “morally justified” without appealing to those very same biologically evolved moral sentiments. Nonetheless, they insist on appealing to them, and using them to justify the distinct values that could be justified independently. So, in order to make this (unnecessary and impossible) link between biology and ethical justification, R&M must show how the biological moral sentiments are somehow morally good.

R&M go about this by deciding that “in so far as the moral sentiments, as adaptations brought about by genetic variation and natural selection, facilitate actions that are morally right and lead to states of affairs and objects that can be considered morally good, these sentiments themselves are morally good” (163). The mistake in this approach is clear: how can the moral sentiments be morally good just by the fact that they play an instrumental role in actions that are morally right? For instance, does not oxygen play the same role? Without oxygen we would not be able to be morally good, therefore oxygen surely facilitates moral action. But, obviously, R&M would not want to bestow moral worth upon oxygen in the same way they just have upon our neural network. Perhaps I am being unfair, since oxygen, while facilitating moral action, does not play the same causal role as our biology. Oxygen just helps us stay alive, but our

biology actually makes us want to behave morally, at least so R&M would argue. There are two potential problems with this argument.

The first problem is that if biology plays too much of a causal role in our moral action, then this begins to undercut the freedom and consciousness that is necessary to moral action, as R&M have themselves recognized. However, R&M are not biological determinists, so this problem is easily overcome by saying that, while biology plays a causal role in our behavior, it is only one factor among many (perhaps setting up the general parameters), and plenty of room must be left for culture and freedom.

The second problem is the perennial problem of evolutionary ethics: moral justification. In the passage quoted above, R&M say they are only going from oughts to oughts, which would avoid this problem (of course, it would also mean they were no longer doing evolutionary ethics). R&M seem on the cusp of abandoning evolutionary ethics when they say “Justifications of morality are concerned with assessments of motivations, actions, and beliefs” (164). But they also say, “We take a naturalistic justification of ethical claims to be the use of empirical premises to provide adequate reasons for holding ethical conclusions” (164). These two positions seem at odds, and it is hard to understand how R&M endorse both. However, it is because of their misunderstanding of the is/ought distinction: that facts can assume the role of norms. Based on this mistake, they believe that an empirical premise can provide a reason for an ethical conclusion.

The alert reader will no doubt be prepared for R&M to conflate causal explanations with moral justification, since empirical evidence can only produce the former. However, R&M are prepared for this objection. They note that, “Darwinian explanations of moral sentiments require evolutionary causal accounts [,] and these are available in terms of how moral sentiments

promote survival and reproduction” (166). However, “meta-ethical justifications would require evolutionarily based justificatory reasons for the moral goodness and rightness of moral sentiments” (166). And crucially, “none such are available and evolutionary explanatory causes are not suited for the job of serving as justificatory reasons since there is a fundamental distinction between causes and reasons” (166). The problem is clear. How do they overcome it?

R&M’s response to this problem is to conclude that, “There doesn’t seem to be much reason to insist upon a fundamental distinction between causes and reasons” (166). And why is this? As they say, because “it seems beyond dispute now that the original basis for making a fundamental distinction between actions based on reasons and behaviors based on causes—that actions are logically related to the reasons that accounted for them, but causes are not so related to the events they produce—is not tenable” (166). R&M further conclude that since such a position is untenable, the consequences of such a position, “namely that the sciences are confined to the empirical investigation of the contingent connections between causes and effects, while some other sort of investigation [say, philosophy] displays the necessary relationships between reasons and human behavior,” ought to be rejected (166). However, if I can show that a fundamental distinction does indeed exist between causes and reasons, then by the logic of their own argument this would mean that the sciences are correctly confined to the descriptive realm.

In order to do so, I confront their main objection to such a distinction. R&M assert that the main basis for once insisting on a distinction between causes and reasons was because causes were not seen as logically related to the events they produce, whereas reasons were. However, it seems to me that causes have always been seen as logically related to the events they produce, indeed this is the defining characteristic of what makes a cause a cause. Therefore, R&M must mean that causes were not seen as logically related to the events they produce in the same way as

reasons were for their outcomes. But this is still true. That is because reasons give a justification, whereas causes only give an explanation. This was the distinction R&M were trying to overcome in the first place! They seemed aware of this important distinction, and its (crippling) consequences for evolutionary ethics. And in order to overcome it, they merely asserted that such a distinction does not exist, and proceeded to conflate reasons and causes.

That R&M indeed conflate reasons and causes becomes apparent. “[R]easons (considered as wants/desires and beliefs) can be causes of actions” (167). But we don’t want to consider reasons as wants/desires. We want to consider reasons as justifications! R&M have conflated reasons and causes by exploiting the fact that the word “reason” can be used causally or as a justification. That is how they can say that, “On the other hand, causes can serve as reasons” (167). And this is the manner by which they are able to conclude that “the Darwinian naturalist [...] can provide not only a causal explanation of the [moral] sentiments but a reasoned justification for them” (167). This conclusion makes it obvious that they are subtly moving back and forth between different understandings of the word “reason,” because if reasons and causes were essentially the same thing, as R&M just asserted, then why would they conclude that their evolutionary ethic can provide both causes and reasons, since doing so would be redundant. And indeed, reason appears along with “justification” in this concluding statement.

This moving back and forth between the meanings of reason is itself unreasonable. In the very next paragraph, R&M are back to talking about reasons in the sense of justification. That is, after conflating the causal ought and the moral ought, they return to trying to give a moral ought for their evolutionary ethic. This is reminiscent of Richards. He too conflated both oughts, but then said it did not matter, because of the moral goodness of altruism and community welfare.

Altruism for the benefit of the community was Richards' "supreme principle" whose moral goodness he could ultimately not show.

For R&M, "What makes an action good in the most fundamental sense, what justifies it, is that it promotes human adaptations and, thereby, fitness leading normally to survival and reproduction. That is the ultimate justification" (167). And so instead of a supreme principle, we have now an "ultimate justification." But what is it about promoting human adaptations and furthering survival and reproduction that makes doing so morally good? They return to their argument from instrumentality: it is because "human survival and reproduction is a necessary condition" for moral behavior that it is therefore good (168).

Thus we believe that the value of human fitness can serve a justificatory role for the value of the objects of the moral sentiments and must, as a necessary condition for the above-mentioned values, be presupposed as valuable in any justification of these values, or actions based on these values. As such, human survival and reproduction is not a mere instrumental value, that is, one that can be set aside in the achievement of some goal. (168)

R&M need to be able to show that the moral sentiments are not merely instrumentally morally good, in order to have a founding for their evolutionary ethic. However, they can only show how the moral sentiments are necessary for the fulfillment of values, not how they are good in themselves. They insist that this does not make the moral sentiments merely instrumental, because it is not as if they can be set aside in the achieving of values. Rather, they are absolutely necessary. But as I mentioned, so is oxygen. Oxygen cannot be set aside in the fulfillment of values, even for those of us who are skillful at holding our breath. R&M have only shown that the moral sentiments are absolutely instrumental, not intrinsically morally good. This means that we still need a reason for appealing to the moral sentiments, and in the absence of such a reason, R&M's evolutionary ethic collapses.

## *Conclusion*

There is an ironic ambience to the failure of R&M's evolutionary ethic, which makes it singularly appropriate as a capstone to our examination of the substantiators in general. The irony is that, not only did R&M show why evolutionary ethics is impossible, but they also revealed what it ought to be replaced and superseded with. R&M seemed to have arrived at the fact that actions of moral goodness and rightness are distinct from natural non-moral properties, and that they could be established independently of reference to such properties. R&M even correctly identified the process by which moral truth is arrived at and established: a process of deriving of oughts from oughts and values from values. If they had only continued on this line of thought, they would have then attempted to defend the value of human survival and reproduction, which they correctly identify as a basic human value, in terms of moral arguments. Doing so would have saved them from a host of logical fallacies, which they committed in their attempt to link values with biology, and found them there.

The reason R&M make this mistake of turning away from the variant of ethical inquiry I will come to advocate, and instead turn towards the empirical sciences, is not only because they misunderstood the is/ought distinction. Although all the substantiators do indeed misunderstand the is/ought distinction, the fact that they first misunderstand the nature of the ethical realm is of primary importance. It is because they doubt the possibility of achieving objectivity through philosophical inquiry that they then turn towards something more "solid." But the supposed solidity of the sciences is ultimately illusory with regards to moral knowledge.

Substantiators scramble to overcome the is/ought distinction because they are genuinely concerned with defending moral values. And if values cannot be based on anything but more values, they see this circularity as a problem. As such, they recruit science to their purposes. In a

sense, then, the mistakes of the substantiators are based on a more noble sentiment than those of the skeptics, who accept the nihilism of their misunderstanding of the ethical realm. I now turn to the skeptics.

## Chapter Four: The Skeptics

### *Introduction*

In this chapter, I explore the second prong of EP's normative project. I examine the skeptics within their own paradigm. I start from their premises, and proceed according to their logic. I do not begin from an external vantage point and critique their conclusions; I explore them from within, and find them wanting. I have three primary criticisms of evolutionary skepticism. First, it violates the is/ought distinction. Second, it logically leads to a self-refuting nihilism. And third, skepticism's underlying ought is contradicted by its conclusions, thereby making it a doubly self-refuting position. I show that these three mistakes rest upon two underlying failures of skepticism: to appreciate the possibility for objective values through reason, and to see the supposed distinction between substantive ethics and meta-ethics as a false dichotomy.

In exploring the skeptics, I deal chiefly with the ideas of Michael Ruse. Obviously, Ruse is not the only skeptic. However, he is without a doubt the most prolific, and perhaps the most articulate, of the bunch. Ruse's arguments nicely lay out the beginning, middle, and end of the skeptic's view of the relationship between EP and ethics. An in-depth examination of Ruse reveals the fallacies that emerge from within his own arguments. I conclude by showing how these fallacies cripple the claims of skepticism, and point to the need for moral realism.

### *Ruse and the Skeptics*

I begin by noting that there is much upon which the substantiators and the skeptics find common ground. When it comes to the causal story of evolution's role in the moral development

of human beings, substantiators and skeptics are in agreement. They agree, “morality or rather a moral sense is something that is hard-wired into humans” (Ruse and Wilson, 2006: 556). They agree that morality is given to us by evolution, and that “the prevailing view [is] that natural selection has served as the principal agent in the origin of humanity,” although there are other selective pressures as well (Ruse & Wilson, 2006: 557). Substantiators and skeptics also agree that the traditional approach to evolutionary ethics was flawed. They both point to recent technological advancements as having rightfully led to the resurgence of evolutionary ethics, believing that “thanks to new developments in evolutionary biology itself, the traditional approach does not exhaust the subject” (Ruse, 1993:158).

To the extent that there is disagreement in the evolutionist community regarding the finer points of how evolution works, it is just as likely to occur amongst substantiators and skeptics themselves as it is to occur between these two groups. In other words, in the descriptive realm, the lines between substantiators on the one hand and skeptics on the other are essentially nonexistent. It is in the normative realm, regarding the application of EP to ethics proper, where these two groups detach and go their separate ways.

Where substantiators see a connection between EP and ethics, to the extent that we can ground our values in the objective facts of our biology, skeptics argue there is no such connection. The skeptics do not see any reason to believe that the process of evolution has bestowed moral goodness, or some sort of progress, on humans. In fact, considering how evolutionary theory portrays the process of selection, as focused on survival and reproduction, skeptics conclude there seems good reason to assume there is no intrinsic moral goodness as a result of this process. Considering the substantiator’s position, Ruse concludes, “[i]f we think that [the descriptive realm] has any relevance to the foundations [of ethics], then surely we

violate Hume's Law and smash into the naturalistic fallacy" (1995: 231). Ruse sees the is/ought distinction as a real distinction, although his thoughts on its implications for ethics are complex, and will be flushed out more fully below.

The skeptics see morality as a product of evolution. As an adaptation, morality serves a biological advantage. They conclude that there is no sound reason to presume that there is any intrinsic moral goodness in our surviving and reproducing. Evolution cannot show this, it can only give a causal explanation of why we might think so and feel this way. Since evolution can only give a causal explanation, there is no objective foundation for our values. Indeed, because EP can give a causal explanation, it shows that any such justification is impossible. Our values are a product of evolution, and that is that. There are no oughts.

For Ruse, Darwinism properly understood leads to skepticism, a moral non-realism. Not concerning substantive claims, but claims to meta-ethical objectivity. Although the is/ought distinction is real, Ruse contends he avoids it. How can one derive an *ought* from an *is* when one is concluding there are no *oughts*. The *is* shows us there are no *oughts*. But the result is not nihilism, because we will find it impossible not to act in accordance with our biology anyway. Thus, EP has shown us the nature of the ethical realm, entailing the conclusion of the impossibility of ethics proper. Ethics is just an illusion fobbed off on us to get us to cooperate (1995: 234).

I have now presented the core of the skeptic's argument. Below, I will carefully lay it out, and show how serious problems emerge from within its logic. Before doing so, however, I want to briefly highlight these problems. We have seen the core of the skeptic's argument, now let us see the initial problems. This allows for a richer subsequent examination of skepticism.

### *Initial Problems*

The careful reader will have now realized an underlying contradiction in the skeptic's position. That is, skeptics argue there is no connection between EP and ethics, but they reach this conclusion based on a relationship between EP and ethics: that evolution's causal tale removes the possibility of objective values. Skeptics say the is/ought distinction is real, and one cannot proceed from facts about how the world is, to claims about how we ought to behave. Since *is* statements are the only objective reference point, our claims about how we *ought* to be are without objective foundations, lacking ultimate verification in something "out there" (1993: 153). But, asks the careful reader, how has the skeptic reached this alarming conclusion? The answer is the skeptic has reached this conclusion by examination of the descriptive realm. In other words, the skeptic has reached a conclusion concerning the ethical realm on the basis of *is* statements. The skeptic has proceeded from an *is* to an *ought*! It just so happens that, in this case, the *ought* is that there are no *oughts*. Paradoxically, this is still an *ought* deduced from an *is*. As such, it represents a violation of the is/ought distinction, which the skeptics have agreed to adhere to.

Previously, I have shown that, when substantiators believed they had successfully proceeded from an *is* to an *ought*, that they had merely gone from an *ought* to an *ought*. If I now charge the skeptics of going from an *is* to an *ought*, albeit in a roundabout way, do they not actually have an underlying *ought*, from which they have derived their secondary *ought*? Yes, this is the case. Although it is never explicitly stated, Ruse's underlying *ought* must be something along the lines of: notions of the ethical realm should be based on well-founded evidence and coherent ideas. This is not a factual statement. Rather, it is a moral claim about what people ought to base their moral claims on. That something like this must be Ruse's

underlying value can be deduced from his criticisms of traditional evolutionary ethics, the substantiators, and different variants of spiritualism. The problem with all these schools of thought, according to Ruse, is that they base their moral systems either on dubious evidence, or draw the wrong conclusions due to their incoherent ideas about how the world actually works. Thus, the value underwriting Ruse's entire project is ensuring well-founded and coherent ideas for our ethical values. Ruse believes that his conclusion that there is no objective foundation to ethics is well founded in evidence and coherently thought-out.

Considering Ruse's underlying *ought*, the problems with his theory are manifold. First, because of his unapologetically naturalistic approach to philosophy, the only evidence he can consider is that of the descriptive realm. Factual, naturalistic claims are the only claims capable of being verified, they are only ones based in an objective world "out there." However, since this is the only available evidence for Ruse to base his ethic upon, it means he cannot but violate the is/ought distinction in reaching his conclusions for the ethical realm. The conclusion that there are no oughts is indeed a moral claim, as it only leads to nihilism. And Ruse has made this (moral) claim on the basis of *is* statements, or so he thinks.

Second, even if we allow Ruse to escape from a purely naturalistic perspective, thereby allowing him to count as evidence non-natural properties, which would save him from violating the is/ought distinction, he still ends up with nihilism. Nihilism presents a problem for Ruse, not because of its potentially scandalous consequences, but because it is a self-refuting moral doctrine in the way Ruse wants to present it. The way in which Ruse attempts to deal with this problem, by encouraging us to act in the manner we biologically prefer, only serves to reinforce the logical contradiction within his ethic. That is, Ruse contradicts himself when he wishes to maintain that there is still good and bad, and that we ought to do the latter and avoid the former,

because he has dispensed with any objective reference that would otherwise render coherence to such last-ditch claims.

Third, even if we ignore Ruse's violation of the is/ought distinction, and his conclusion of self-refuting nihilism, Ruse nonetheless contradicts his underlying ought. Ruse's violation of the is/ought distinction, and his resulting nihilism, are a result of two further mistakes. First, Ruse has only presented moral claims as emotional projections into the world without objective foundation. He has not considered reason's important role in giving an objective foundation to our values. Second, Ruse has aimed his skepticism at the foundations of our values, presenting it as a meta-ethical skepticism. As such, he means his conclusion that "there are no oughts" to be a descriptive claim about the ethical realm. But there are no such non-moral claims concerning moral claims. The fact that Ruse's meta-ethical criticism only logically leads to the moral doctrine of nihilism (i.e. the *ought* that there are no *oughts*), shows that this was never a descriptive claim. Meta-ethics and substantive ethics are one and the same, and the ethical realm is *oughts* all the way down.

Had Ruse considered more seriously moral realism, he would have not made these mistakes. This means that his ethical ideas are neither well founded nor coherent. Thus, by the logic of his own argument, his own theory ought to be abandoned. The way in which Ruse's evolutionary ethics fails, points nicely in the direction of moral realism.

I now turn to flush these problems out in Ruse's theory. I begin with his violation of the is/ought distinction. I show that his theory leads logically to nihilism, though he denies it. I reveal that he has doubly contradicted his underlying *ought*, by leading to nihilism and not seriously considering moral realism. And I conclude by showing how these three mistakes are

the result of his denial of value-objectivity and his false dichotomy between substantive and meta-ethics. This leads into the next chapter, and our discussion of moral realism

*Ruse's Ruse*

### Naturalistic Fallacy

At first glance, Ruse's understanding of the is/ought distinction seems ambiguous. On one hand, he says, "moral philosophy has been constrained by the supposed absolute gap between is and ought, and the consequent belief that facts of life cannot of themselves yield an ethical blueprint for future action (Ruse & Wilson, 2006: 555).<sup>\*</sup> Further even, "that it will prove possible to proceed from a knowledge of the material basis of moral feeling to generally accepted rules of conduct" (2006: 556). Notice that, even if this were true, it is only an *is* statement about our *oughts*. As such, Ruse is not warranted in concluding that "[t]o do so will be to escape—not a minute too soon—from the debilitating absolute distinction between is and ought" (2006: 556).

However, there is another Ruse, a Ruse who maintains that "[i]t is indeed true that you cannot deduce moral claims from factual claims" (1995: 233). And further, that "[t]he evolutionist is no longer attempting to derive morality from factual foundations" (1995: 234). Ruse maintains that, "[m]y kind of evolutionary meta-ethics agrees with the philosopher that the naturalistic fallacy is a fallacy and so also is the violation of Hume's Law" (2006b: 21).

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<sup>\*</sup> Again, we see the problem with calling this distinction a gap. In a sense, Ruse is correct that facts can *seem* to yield an ethical blueprint. But that is because facts always come with norms, such that the norm is often within the fact. Both are intertwined, but only the norm is yielding ethical implications.

Certainly, these ostensibly opposed statements concerning the *is/ought* distinction seem hard to resolve. Is the *is/ought* distinction a debilitating mistake that can be overcome? Or is it an insurmountable obstacle, revealing fallacious reasoning? Can it be both? According to Ruse, the answer is: kind of. For Ruse, the naturalistic fallacy is real. But Ruse contends that his evolutionary ethic “avoids fallacy, not so much by denying fallacy is fallacy, but by doing an end run around it, as it were” (2006b: 21). To be clearer, “[t]here is no fallacious appeal to evolution as foundations because there are no foundations to appeal to!” (2006b: 21).

Thus, all ambiguity concerning Ruse’s (mis)understanding of the *is/ought* distinction is resolved once we realize the skeptical backdrop before which it takes place in front of. How can there be a fallacious appeal from *is* to *ought* if one contends that there are no objective *oughts* in the first place? Ruse believes that, “properly understood, the Darwinian approach to ethics leads one to moral skepticism, a kind of moral nonrealism” (2006b: 25). How so?

We begin with the usual evolutionary ethicist’s position, that “[o]ur moral sense our altruistic nature, is an adaptation—a feature helping us in the struggle for existence and reproduction” (1995: 230). In other words, “[t]o make us cooperate, evolution has filled us with thoughts of right and wrong, the need to help our fellows, and so forth” (1995: 230). Thus, it is in our biological interests to cooperate. However, Ruse assures us that we are not blind robots, “[w]e are inclined to behave morally, but not predestined to such a policy” (1995: 230). These are Ruse’s crucial *is* statements, the same as the substantiator’s.

“But what has any of this to do with the questions that philosophers find interesting?” (1995: 230). Does such an evolutionary tale lead to moral nonrealism? Ruse nicely spells out the reasons for objecting to his view, e.g. that “the evolution of ethics has nothing to do with the status of ethics” (1995: 233). Ruse realizes that “[t]o suppose that the story of origins tells of

truth or falsity is to confuse causes with reasons” (1995: 233). So why does Ruse think that it “is a great bonus” that “the evolutionist picks up and goes beyond [the philosopher] in linking the principles of justice to our biological past,” if he has just shown why doing so is irrelevant? The reason is because Ruse believes EP enables us to partake in the ultimate meta-ethical exercise, peering behind why we think morality is moral.

This is Ruse’s “powerful response,” that “using factual claims about origins, you can give moral claims the only foundational *explanation* that they might possibly have (1995: 234, emphasis original). Further, “thanks to our science we see that [moral] claims [...] are no more than subjective expressions, impressed upon our thinking because of their adaptive value” (1995: 234). In other words, “we see that morality has no philosophically objective foundation. It is just an illusion, fobbed off on us to promote biological ‘altruism’” (1995: 234). Within this important paragraph, Ruse commits a number of mistakes, which threaten to pull our analysis of them in different directions. Of interest to me now is only how he has just violated the is/ought distinction.

Ruse began by attesting to the legitimacy of the naturalistic fallacy and Hume’s Law. Recall that I avoid calling the is/ought distinction by these other names. These other names seem to obscure the crucial element of the is/ought distinction: that facts and norms play different roles. As such, when we are speaking of *is* statements, we can never deduce what *ought* to be done. And when making moral claims, it is *oughts* all the way down. I have asserted that, due to the manner in which evolutionary ethics mixes these two logics of inquiry, they all fail to maintain this distinction. Can Ruse maintain this distinction in his evolutionary ethic?

Ruse is attempting to keep his analysis in the descriptive realm, that is why he points to the distinction between causes and reason, and then reemphasizes that he is giving an

explanation. However, mere sentences after showing how reasons and causes are distinct, he argues that the biological causes undercut our reasons. The extent to which our reasons (our *oughts*) are undercut by our evolutionary history (our *is*) is tremendous: “Morality is subjective—it is all a question of human feelings or sentiments” (1995: 236).

Our justifications for our moral claims have just been rendered secondary to the primary evolutionary backstory. The causal explanation has just made unnecessary any justification. Ruse believes “that sometimes, when someone has given a causal explanation of certain beliefs, one can see that the beliefs, themselves, neither have foundation nor ever could have such a foundation” (1993:150). In the case of our values, “[w]hen we see our moral beliefs are biologically advantageous, that puts an end to it” (1993: 151).<sup>\*</sup> At this point, far from seeming distinct, reasons and causes seem closely linked.<sup>†</sup> Is Ruse still in the descriptive realm?

Ruse has concluded that the *is* statements of EP show that the *ought* statements of ethics are without objective foundation. In a sense, there are no *oughts*, simply our projection of moral sentiments into a morally inert universe, as we arrogantly attempt to objectify our claims. When laid out this way, it seems as if Ruse has only made an *is* statement about our *ought* statements. If this is so, he is still in the descriptive realm, and has not violated the *is/ought* distinction.

However, the statement “there are no oughts” is not the same as the statement “people believe X is morally wrong.” Granted, both are derived from factual evidence (assuming that they are both true). Crucially, though, the statement “there are no oughts” is a moral statement.

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<sup>\*</sup> These interesting arguments, and the potential problems they pose for moral realism, are part of the skeptic’s arsenal that I reserve for the next chapter. Here, I am only concerned with how they represent a violation of the *is/ought* distinction.

<sup>†</sup> NB I am saying that Ruse has linked reasons and causes, not that he has conflated them, as some substantiators did. Ruse said they were distinct, then he linked them in such a way that causes undercut the objectivity of reasons, removing justification from ethics proper.

This is because the statement “there are no oughts” logically entails conclusions concerning the evaluation of ethical behavior. The reason this is not at first apparent is because the paradoxical ethical conclusion is that there is no such thing as “ethical” behavior, that it does not matter how one behaves. As such, whether one wishes it or not, when one says “there are no oughts,” one has made a moral claim about the nature of the ethical realm. Thus, Ruse has derived an *ought* statement (which leads logically to nihilism) on the basis of EP’s *is* statements. He has violated the is/ought distinction.

### Nihilism

That Ruse has violated the is/ought distinction is only the first (possible)\* problem with his evolutionary ethic. I now examine the problem that the way in which he has violated the is/ought distinction has led him to the moral doctrine of nihilism. Of course, nihilism is not “moral” in the conventional sense of the word, as in virtuous. By “moral” I mean only that it makes a claim concerning the nature of the ethical realm, which then has to be defended (i.e. justified) with further *oughts*. What makes nihilism self-refuting is that it begins by rejecting the normative basis necessary for any successful justification on its behalf. How does Ruse attempt to escape from this problem?

Before getting to that, allow me to first further establish that Ruse has indeed got himself into nihilist territory. Ruse says, “[u]ltimately, there is no reasoned justification for ethics in the sense of foundations to which one can appeal in reasoned argument. All one can offer is a causal explanation to show why we hold ethical beliefs” (1995:235). To illustrate, one might hold the

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\* I say “possible” because Ruse may want to claim he is not restricted to naturalistic evidence, though I believe this is the case for all evolutionary ethics, by definition. However, even if he takes a non-naturalistic escape route, he still contradicts his underlying ought.

ethical belief that incest is wrong. But once one learns that such a belief is a product of natural selection, due to its reproductive advantage, one has no good reason to presume that one actually holds this belief because it is true. Evolution has selected for beliefs that are advantageous, not beliefs that are “true.” We therefore reach the sobering conclusion that “[t]he central claim of the evolutionist is that ethics is subjective, a feeling or sentiment, without objective referent” (1995: 240). I cannot say that incest or murder is wrong, merely that I happen to dislike them, along with too much ketchup on my French-fries.

Suffice it to say, Ruse’s theory, in particular, his supposedly meta-ethical critique of ethics, has led to nihilism. Indeed, Ruse seems to recognize this, when he says, “[t]he simple fact is that if we recognized morality to be no more than an epiphenomenon of our biology, we would cease to believe in it and stop acting upon it” (1993: 152). But is that not exactly what Ruse is doing, revealing ethical objectivity to be an illusion? And yet, he maintains, “I am fairly confident that my having told you this fact will not now mean that you will go off and rape and pillage, because you know that there is no objective morality” (2006: 23). But why not? What is stopping us, in the absence of right and wrong? The answer constitutes Ruse’s first attempt to combat his nihilistic conclusion.

The answer is that, so important is our belief in an objective right and wrong to our willingness to cooperate (and hence to our reproductive success), that evolution must make us believe in moral objectivity. Thus, “even though morality may not be objective, in the sense of referring to something ‘out there,’ it is an important part of the experience of morality that we think it is” (1993: 153). Or, in other words, an important part of the experience of ethics “is not just that we feel that we ought to do the right and proper thing, but that we feel that we ought to do the right and proper thing because it truly is the right and proper thing” (2006b: 21). So, even

though Ruse's theory seems to lead to nihilism, this is not a problem, because we will keep acting in accordance with our "good" genes. Does this save Ruse from self-refuting nihilism?

The answer is no. The point was never that Ruse's theory is wrong because it will lead to people actually raping and pillaging. Such a potential consequence is quite beside the point. The problem is that, besides already having violated the is/ought distinction, Ruse is now trying to have his cake and eat it too. Nihilism presents a problem for Ruse's theory, in part, precisely because he wants to assert that nihilism does not present a problem for his theory. If Ruse had been willing to bite the bullet, and admit that his relativist conclusions leave him with no reason to prohibit the murder of innocents, rather than the murder of cabbage on Fridays (1993: 151), his theory would have been slightly less contradictory.\* But Ruse makes a problem for himself, on a logical level, by trying to argue for "ethical" behavior. To reiterate, the problem for Ruse's theory, here, is the inverse of what is often seen as a problem for moral realism. Moral realism is not wrong simply because people will not necessarily act in accordance with moral truth once they know it (recall Hume's mistake in this regard). And Ruse's theory is still nihilistic, even though people will not necessarily act in accordance with nihilism once they know it.

Ruse has another strategy to attempt to combat the nihilism. Ruse admits that he has called morality a collective illusion (1993: 151). But, he says, "the qualification collective is very important here" (1993: 151, emphasis added). For it is the "collective" element of morality that allows us to distinguish between "sensible ethical beliefs," such as "Don't hurt old ladies" and

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\* I say "slightly" because Ruse still has to face the fact that, in leading to nihilism, he has ignored the superior account of the ethical realm given by moral realism, and is therefore contradicting his underlying value to base his ethical conclusion on good evidence and coherent ideas. Of course, this assumes he has taken the non-naturalistic "escape" that I have offered him.

“crazy ethical beliefs,” such as ““Be kind to cabbages on Fridays”” (1993: 151). “The whole point of ethics,” says Ruse, “is that we are all in it together” (1993: 151).

However, the whole point of ethics is not merely that we are in it together. The whole point of ethics is that it is based on reason, and that it is through reason that we are able to establish the norms that we will all abide by. Indeed, we are only “all in it together” insofar as our ethic is founded upon reason. That is because it is reason’s standards that even enable us to distinguish between “reasonable” and “crazy” ethical beliefs. What makes the belief that cabbages should not be mistreated on Friday crazy is that a rational, coherent defense cannot be given, which is not the case for the prohibition of hurting old ladies. That is why people are more willing to accept the latter than the former, and this is not undercut by the fact our biology has contributed to this belief. How is Ruse using these evaluative terms of “sensible” and “crazy,” since there is no non-arbitrary standard from which to make evaluations in his paradigm? Ruse cannot coherently say that the belief that cabbages ought not to be hurt on Fridays is “crazy,” he can only say that he feels he dislikes it. But, of course, this feeling is not really based in anything objective.

Ruse’s writings, while pointing to the illusory foundations of all ethical beliefs, nonetheless continue to make claims that we should not kill innocent people (1995: 238), that we should care for our children (1995: 239), and so on. Ruse thus says there are no objective values, but nonetheless tries to maintain that we ought to act in certain ways rather than others. As such, Ruse’s nihilism represents what Strauss has called elsewhere “noble nihilism” (Strauss, 1965: 48). But as Strauss says, “[w]e cannot take seriously this belated insistence on responsibility and sanity, this inconsistent concern with consistency, this irrational praise of rationality” (1965: 47). In order to even understand Ruse when he makes such evaluations, we need to step out of the

nihilism that he claims to be working within, and which he maintains is the objective truth. Ruse requires of us an Orwellian double-think, where we accept the truth as good, at the same time as we accept that nothing can be good in truth.

In sum, all Ruse has that is objective, and which he can appeal to in order to save his theory from this nihilism, are naturalistic, factual statements. Of course, it is exactly these that he cannot appeal to, lest he commit the naturalistic fallacy (in its more simplistic form). And anyway, he has already committed himself to the position that moral claims cannot be derived from such factual statements. As such, Ruse's evolutionary ethic was always headed for a nihilistic conclusion from the moment he said *oughts* cannot be objective. To reiterate, the problem is not that Ruse has led us to nihilism, but that he violated the is/ought distinction in doing so, by deriving the *ought* of nihilism from EP's evolutionary *is*. Further, he made things worse for himself by advocating this "noble nihilism." In doing so, he only reinforced the fact that nihilism is inescapable once you start down the slippery slopes of relativism, by cutting ethics off from objectivity. However, all that said, not only did Ruse violate the is/ought distinction and lead to a doubly self-refuting noble nihilism, but, in doing so, he also contradicted his underlying *ought*. It is to an examination of this further problem that I turn to now.

### Contradictory Oughts

According to the logic of Ruse's argument, he has violated the is/ought distinction. This means he has tried to proceed from an *is* to an *ought*. However, because the is/ought distinction is insurmountable, all he has done is gone from an *ought* to an *ought*. We know that he has not gone from an *is* to an *is*, because he has ended with the moral doctrine of nihilism, i.e. outside of

the descriptive realm, and in the ethical realm. As such, if he ended in an *ought*, then he must have begun with an *ought*. What was his initial *ought*?

When exploring the initial *oughts* of the substantiators, which were also hidden below the surface of their theories, it was found that their initial ought made their theories inescapably circular, in a vicious way. When dealing with oughts, arguments will always be circular, but the aim is for coherence. With the substantiators, their circularity only begged the question of what supported their *ought*, besides itself. Since they only had *is* statements, the *ought* was unsupported. Now, with Ruse, we find that his initial *ought* does not make his argument circular or question-begging. Rather, it makes the argument contradictory.

Ruse's initial *ought* is that our ethical concepts ought to be well grounded in evidence and supported by coherent ideas. This is not a factual statement. It is a moral claim concerning the responsibility we have as rational agents when it comes to asking moral and ethical questions. It is on the basis of this initial *ought* that Ruse rejects traditional evolutionary ethics and the substantiator's project (as well as religion). That is, he believes their ethical conclusions are not based on good evidence or supported by coherent ideas. Ruse does not necessarily disagree with their conclusions. Ruse sees altruism, truth-telling, and childcare as good things, but he believes the reasons or explanations given by these other groups are flawed in some way. Thus, it is this striving for good evidence and for coherence that motivates Ruse's project.

For Ruse, good evidence means naturalistic, factual evidence. Everything else is merely feeling or sentiment, without an objective reference. So if he wants to ground his ideas about ethics in good evidence, doing so entails a naturalistic approach. Because he ends with an *ought*, however, he violates the *is/ought* distinction. This violation makes his theory incoherent. Further, Ruse ends in nihilism, and his attempt to establish a noble nihilism only contributes to the

incoherency of his evolutionary ethic. Thus, at purely internal level, Ruse's concluding *ought* of nihilism contradicts his initial *ought* of striving to base our ethical ideas on good evidence and coherent ideas.

Why does Ruse end up in this contradiction? Answering this requires stepping outside of Ruse's paradigm, and offering an external critique. This critique reveals the initial mistakes Ruse's theory makes, and reinforces the fact that his theory is an incoherent base for our ethical ideas. Examining this external critique begins to take us down the path of introducing the doctrine of moral realism.

#### *Conclusion: Towards Moral Realism*

An *is* without an *ought* entails no obligations for ethical behavior. This is why an *is* does not need to be justified with a moral argument (i.e. an *ought*), whereas an *ought* does. Because Ruse thinks he has found a non-moral foothold in the moral realm, he believes he can make descriptive *is* statements, which have implications for ethical behavior, without supporting moral arguments. However, there is no such thing as meta-ethics, understood as non-ethical premises about ethics.

One can certainly make descriptive statements about morality. For instance, "Some Christians believe pre-marital sex ought not to be engaged in" (unless, perhaps, one is engaged). This *is* statement does not need to be supported with an *ought*, because it has no implications for one's behavior. A supposedly meta-ethical statement, which lies behind the previous statement, is, "One ought not to engage in behavior condemned by the Bible." This statement has implications for ethical behavior. It must therefore be supported by another *ought*, perhaps

elaborating on why a life in accordance with Biblical teachings might be a good life, and then, why a good Christian life is worthy, and so on.

Ruse's conclusion, that evolutionary ethics results in a moral skepticism concerning the foundations of our moral claims, is just as much an *ought* as any "Thou shalt." As such, he has to justify it with a moral claim. He has two options here. First, he can try to say his conclusion is well founded and coherent, and that it ought to be accepted because we ought to base our *oughts* on well-founded and coherent ideas. But Ruse's theory is neither well founded nor coherent, since his conclusion depends on a violation of the is/ought distinction. Second, ignoring the first problem, he can say that, although the facts say there are no objective morals, we should of course continue to act as if there are. But such a position, "noble nihilism," is self-refuting. Thus, Ruse's theory encounters problems because it is premised on a false dichotomy between substantive ethics and meta-ethics.

Ruse's charges moral claims with being nothing but subjective projections of feeling and sentiment because they have no objective reference to something "out there." However, ethics is not supposed to have an objective referent in something "out there"—that is not what makes ethics objective. What makes ethics objective is that it is based in reason, instead of dominated by feelings and sentiment. That is why morality feels objective, as if it is something "imposed on us from without" (1993: 153). But "morality [is] not objective in the sense of referring to something 'out there'" (1993: 153). Because Ruse is working with a false dichotomy, he believes this makes ethics weaker than it would be otherwise, or viciously circular. The truth is that because ethics does not refer to something out there, but is instead founded in reason, it is actually all the more strong and secure than it could possibly be otherwise.

Ruse says that “the evolutionist argues that those who find his or her explanation implausible [i.e. that ethics is not objective] support the very point which is being made!” (1993: 153). This is because Ruse’s whole point is that morality feels objective, even though it is not. So if one retorts that morality is clearly objective because it feels objective, how has one proved Ruse wrong? This is an extraordinary argument strategy on Ruse’s part: the very fact that one disagrees with Ruse proves Ruse right! It is a hard hold to escape from, but I believe I can. By having shown that, not only do I disagree with Ruse, but Ruse seems to disagree with himself, I believe I have started along the way to refuting his theory. What remains now is an explication of the role of reason in objectifying our ethics.

In conclusion, we have now examined the skeptic’s position. The skeptic’s position is more popular than the substantiator’s these days, as it is thought to be more nuanced, less naïve. However, I have shown that the skeptics seem to make more mistakes than the substantiators. Both groups of evolutionary ethicists (unavoidably) violate the is/ought distinction. But whereas the substantiators are only circular in doing so, the skeptics end up being not only contradictory, but doubly contradictory. And two wrongs do not make a right. The ills of both the substantiators and the skeptics must be addressed with the tonic of moral realism.

## PART III: THE ETHICAL REALM

### Introduction

I have concluded that both prongs of EP's normative project fail—evolutionary ethics is not viable. It now remains to introduce and defend the doctrine of moral realism. This chapter easily threatens to become disconnected from the rest of the thesis, as moral realism constitutes a complex approach to ethical inquiry in its own right. I will work to keep our exploration of moral realism tightly tied to our previous examination of evolutionary ethics. My presentation of moral realism aims to achieve the aspirations of evolutionary ethics, correcting the evolutionary ethicist's shortcomings. To achieve this, I separate this last part of the thesis into two chapters. The first chapter will introduce the idea of moral realism, i.e. the particular variant of moral realism that I mean to defend. The second chapter will show how moral realism overcomes the potential problems posed by EP.

I ended the last part of the essay by saying that the way in which evolutionary ethics fails points toward the need for the doctrine of moral realism. Both the substantiators and the skeptics fell upon the sword of the is/ought distinction. In the case of the substantiators, this led to question begging. That is, they could not provide justifications or reasons as to why altruism (or whatever), was a good thing, but only causal explanations. In the case of the skeptics, this led to contradiction. That is, their argument that there are no substantive moral claims was itself a substantive moral claim, though without justification to support it, only causal statements. As such, we can reduce the many failures of evolutionary ethics down to two central problems: violation of the is/ought distinction and dearth of justification in support of substantive moral claims.

I focus on moral realism's attempt to address these two failures of evolutionary ethics. I argue that evolutionary ethics' two central problems are a result of the deeper failure to grasp the independence of the ethical realm. That is, evolutionary ethics fails because all ethical matters can only be addressed by ethical claims, i.e. substantive moral arguments.

The chief aim of this part of the thesis, then, is twofold. First, we need a way to arrive at moral claims without violating the is/ought distinction. Adopting a non-naturalistic approach to moral truth does this, where moral arguments are made objective through reason. Second, we need a way to bring justification (i.e. the "meat" of ethics proper) back into the process of ethical inquiry, as evolutionary ethics has evacuated it. This is achieved once moral claims are supported, not by empirical statements, but by further moral arguments, in an unending chain—what I call "oughts all the way down." My overarching aim in this part is to establish that moral realism's approach to ethics is not discredited or debunked by EP. As such, I end by examining the remaining skeptical arguments launched from EP at moral realism, which have yet to be explored.

At the conclusion of this part of the thesis, the reader will understand: (a) why the ethical realm is independent; (b) how objectivity is possible within the ethical realm; (c) why internal objectification must rely on justification; and (d) therefore, why ethics proper is immune from EP's skeptical arguments. Such an understanding prepares the way for the conclusion of this thesis: establishing a framework for the relationship between EP and ethics.

## **Chapter Five: Moral Realism**

### *Introduction*

Moral realism is an old idea. I will not present a historical overview of its development, as I did with evolutionary theory. Suffice it to say that the tenets of moral realism can be traced back to Plato, Aristotle, Thomas Aquinas, John Locke, Kant, and Hegel, among others. Having emerged from such a tradition, moral realism can be a varied doctrine. Therefore, I have to define precisely what I mean by moral realism. However, before turning to that task, one preliminary matter: Why have I been conflating ethics proper with moral realism?

Throughout this essay, I have used the doctrine of moral realism as a stand-in for ethics itself. Doing so could be seen as controversial, and for good reasons. Ethics is meant to denote all sorts of philosophical approaches to how one ought to live one's life and behave towards others. Why do I suppose that moral realism can represent all of these different approaches? Granted, moral realism cannot fairly represent all of the approaches that could fit under the umbrella of ethics, nor should moral realism try to represent all of them. I have chosen to advocate moral realism as ethics par excellence for two main reasons.

First, moral realism presents ethical enquiry as a non-empirical enterprise, founded on reason. Reason, in turn, is understood to be objective, universal, and absolute (more below on what these three words mean in this context). As I have shown above, with my examination of evolutionary ethics, empirical approaches to ethics do not work. In the following pages, I will lay out why this is the case, and present ethical inquiry based on reason (as defined by moral realism) as the most sensible approach to ethics. Because the central tenets of moral realism constitute the most sensible approach to ethics, I have called them ethics proper. By conferring

the status of ethics proper upon moral realism, I do not mean to say that moral realism is the most popular approach to ethics, now or ever. Indeed as Churchland, Richards, R&M, Ruse, Strauss, Dworkin, and Shafer-Landau all observe, moral realism is among the least popular of approaches. Moral realism is often characterized as arrogant, unfounded, unrealistic, fanciful, or worse. I, however, will work to present it as reasonable.

Second, EP takes aim, first and foremost, at moral realism's approach to ethics. The central concern of this thesis is the (im)possibility of evolutionary ethics. Evolutionary ethics could be adapted to work well with anti-realist approaches to ethics. For instance, constructivism, relativism, expressivism, or other non-cognitivist approaches to ethics. However, evolutionary ethics has been found to limp on both legs, neither able to substantiate nor undercut ethical inquiry. It remains to be shown if moral realism can fulfill the role that evolutionary ethics could not. To turn Ruse's phrase on its head, perhaps moral realism is the phoenix that emerges from the ashes of evolutionary ethics.

These are my two reasons for advocating moral realism: it represents the best approach to ethics, and EP tries to debunk it but fails. These two reasons must both be supported, but threaten to pull in different directions. Realism is assaulted from many different directions within ethics. Defending it from all its critics would extend both beyond the scope of this thesis and my abilities. As such, my main concern will be showing realism to be immune from problems posed by EP. That said, it will be helpful to defend moral realism from some of its other critics, as I introduce the doctrine. Doing so helps paint a better picture of what I mean, and do not mean, by moral realism.

All the different possible variants of moral realism share its central claim: that moral beliefs can enjoy a sort of objectivity (see, Brink, 1989; Dworkin, 2012, 2006; Kramer, 2009;

Shafer-Landau 2012, 2003; Strauss, 1965). That is, that moral claims can be true. And when moral claims are true (or false), they are so independent of the judgments or desires of any agents. As such, moral realism denies the all-too-popular skeptical view that moral beliefs are never true, or that they only derive any “truth” from our endorsement of them (Shafer-Landau, 2003: 1). Moral realism denies that moral “truth” is conjured by humans, the product of a continuing, communal, creative project (such as, say, positive law). Rather, moral truth exists independent of human thought. We discover moral truths, not unlike the case with scientific truths. (Although all moral truths are not necessarily discovered, and certainly not by all of us, which also reflects the case with scientific truth.) These are certainly bold claims. However, they are not ludicrous claims, and realists can back them up, while disproving arguments to the contrary.

Realists believe in moral facts. Already, at this early point, our discussion of moral realism threatens to be limited by the ambiguity of our language. Throughout this thesis, I have repeated ad nauseum that the is/ought distinction correctly frames the relationship between facts and norms: facts cannot make moral claims. However, in order to now adopt the language used in the relevant literature, I will introduce the phrase “moral fact.” Having understood all previous discussion, this phrase will seem to be a contradiction. Facts, understood as descriptive statements, cannot be moral, i.e. normative. However, a moral fact is exactly that: a normative fact. This paradox is resolvable because a moral fact is not a “fact” in the sense that it is descriptive, based on empirical evidence, and discovered by the logic of inquiry employed by the natural sciences. Rather, realists adopt the word “fact” and attach it to the word “moral” in order to emphasize that whatever moral claim they are making has been established as objectively true to the best of our knowledge (similar to the status of a fact in the natural sciences). In order to

avoid confusion, if I mean to discuss facts in the normative sense, I will always call them moral facts, which should be understood as an objective ought.

A last comment in my preliminary attempts to introduce moral realism: my focus is the process of objectification, not its content. By this I mean that I am not concerned with presenting an exhaustive list of supposed moral facts and defending each of them. Doing so would take up too much space, and, ultimately, be a waste of time. It would be a waste of time because, as Kramer notes, in most cases, the main argument concerning the objectivity of morality is somewhat detachable from the concrete moral convictions brought to bear on a given topic (see Kramer, 2009: 10-12). This detachability is not due to any hard and fast distinction between second-order claims about morality and first-order moral claims. (Indeed, the variant of moral realism I come to defend argues that no such distinction exists, and that second-order claims are themselves substantive moral claims, just at a much higher level of abstraction than first-order claims.) Any detachability between an argument for moral objectivity and supposed moral facts is then due to the limited scope of most moral facts (Kramer, 2009: 11). As a parallel, consider how although any given fact about the water cycle, or the formation of mountains, might be wrong, this in itself is no reason to dismiss the objectivity of the scientific method. Thus, I focus mainly on how moral facts might come to be considered objectively true and why. That said, I will discuss and defend a few moral facts at the outset.

I follow the relevant literature in using torture, murder, and slavery as my paradigm examples of moral facts. I do so, not because most people agree on their wrongness (consensus is irrelevant), but because these moral facts have the widest scope, and are the most fundamental. This is because they are closest to the primary ethical principle(s). This is that humans have the responsibility to recognize the inherent dignity of their person. This dignity flows from our

existence as autonomous beings. We are autonomous to the extent that we can interact with our world, discover truths, and plan a life accordingly. Our dignity as autonomous beings gives us the responsibility to recognize this autonomy and dignity in others. Thus, we have a responsibility not to deliberately infringe on another's autonomy and violate their dignity. "The moral prohibition on deliberate bodily injury defines a core of control [over one's life] that we could not abandon without making parallel nonsense of our responsibility over our own lives" (Dworkin, 2012: 288). There is an inextricable connection between one's dignity and one's bodily control. And our dignity as responsible moral agents demands we recognize this moral fact in others.

As Dworkin (2012: 285-291) shows, granting others responsibility over their own life entails recognizing a zone of immunity from deliberate harm. Torture, murder, and slavery are the paradigm violations of this moral requirement. Anyone who disagrees, I believe, does so for illegitimate reasons that contradict the way they indeed interpret reality. Proving this would require at least its own chapter.\* At the very least, anyone who disagrees thereby shows that they think knowledge on the issue is possible, and that it should guide our actions (otherwise, why bother disagreeing in the first place?). At this point, it becomes an examination of one's reasons for either believing or disbelieving a moral fact. And moral realism is mostly concerned with this process (examining internal arguments) rather than its products (moral facts). Realism is

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\* Such an argument would need to draw a distinction between living well (i.e., acting ethically responsible) and having a good life (i.e., having nice things, being happy, being well-liked, being successful, etc.). The next step involves showing that living well is objectively better than having a good life. This is because having a good life is only meaningful to the extent that one has also lived well. For instance, one should not be proud of one's achievements if one has cheated to get them, and so on. This means that one should never sacrifice living less well in order to have a better life. The only way in which torture, murder, and slavery can be coherently justified (without contradicting the autonomy and dignity upon which one bases one's own life plans) entails making the mistake of putting a good life above living well. Granted, this is something people often do. But it is ethically wrong nonetheless.

compatible with disagreement on important questions. Realism aims to show that any agreement or disagreement must be based on a set of coherent moral arguments. In the case of torture, murder, and slavery, they are defended incoherently, while a coherent positive case can be made for their wrongness.

How do realists propose to establish the objectivity of ethics and discover moral facts? As outlined by Shafer-Landau (2003: 3-4), realists have two options: naturalism and non-naturalism. I defend a non-naturalistic approach to moral objectivity. Before showing how such an approach results in objectivity, I will undercut the naturalistic approach preferred by some realists (see, for example, Sam Harris, 2010). Doing so enables us to better understand the non-naturalistic approach.

### *Brink's Naturalistic Moral Realism*

If I claimed to have a difficult task in defending moral realism, surely I have only increased the difficulty by now clarifying that I mean to defend a non-naturalistic variant of moral realism. Moral realism is unpopular, but non-naturalistic moral realism is seen as “mysterious,” “absurd,” or simply insane (Brink, 1989: 163). Often misunderstood as synonymous with supernaturalism, non-naturalism is mentioned in the same breath as “leprechauns and centaurs” (Shafer-Landau, 2003: 3). As Brink delicately puts it, “non-naturalism is no longer thought to be respectable” (1989: 144).

Those realists who hold such low opinions of non-naturalism will say that I have shot myself in the foot by working so hard to prove the existence of the is/ought distinction. True, they will say, the is/ought distinction was a useful tool for burying evolutionary ethics, but it will now dig the grave of any realist arguments as well. Indeed, “most contemporary parties to the

discussion seem to assume that the existence of an is/ought gap would in some way undermine the objectivity of ethics.” This is because “an is/ought gap would undermine ethical naturalism and commit moral realism to an absurd kind of non-naturalism, leaving non-cognitivism as the only sane response” (Brink, 1989: 144).

The whole rest of this chapter is more or less simply an unpacking of the last two sentences of the previous paragraph. I argue that the is/ought distinction does not undermine the objectivity of ethics. If anything, it strengthens it. I show that the is/ought distinction does indeed undermine ethical naturalism, and in so doing, commits realism to non-naturalism. And lastly, I argue that non-naturalism is not absurd, and non-cognitivism is itself the insane response. The goal of this chapter is to have fully supported these assertions.

I agree with Brink that the idea that the is/ought distinction undermines the realist’s pursuit of objectivity, and leads to anti-realism and skepticism, is false. However, Brink also contends that the is/ought distinction does not undermine a realist-naturalist approach (see 156-167). Furthermore, he claims that realism, properly understood, is inseparable from naturalism; Brink believes an adequate realist argument depends on naturalism. As should be clear from my preceding critique of evolutionary ethics, I am wary of such a stance. Is Brink making a mistake somewhere?

According to Brink, “[e]thical naturalism claims that moral facts are nothing more than familiar facts about the natural, including social, world.” That is, ethical naturalism is “the claim that moral facts *are* natural and social scientific (e.g., social, psychological, economic, and biological) facts (Brink, 1989: 156, emphasis original). At this point, Brink sounds much like the substantiators. However, his views on this topic are a bit more subtle, and I find that we do not

actually disagree with each other. That said, I believe the way Brink presents his views is obfuscating, and easily leads to him being misunderstood.

Brink says that when he states that moral facts *are* natural facts/properties, that “are” can denote either identity or constitution. As such, when he states that moral facts are natural facts/properties, he means to say, “moral facts and properties are constituted by, but not identical with, natural and social scientific facts and properties (157). Brink then agrees that it would be “absurd [to] claim that [these] *distinct* properties are nonetheless identical” (157, emphasis added). What, then, is meant by constitution, contra identity, that maintains the important distinction between moral and non-moral properties? And what, according to Brink, might this distinction be, anyway?

By constitution, rather than identity, Brink means to say, “moral properties can be natural properties” although “they [i.e. moral properties] could have been realized in a variety of different ways” (158). In other words, “moral properties are constituted by, but not identical with, natural properties if, though actually constituted or realized by natural properties, moral properties can be or could have been realized by properties not studied by the natural or social sciences” (158). Brink uses the example of “tableness” (although he does not call it by this name). His example is that a table is constituted by, and only realized through, natural properties. However, “tableness” is not identical with “a particular arrangement of microphysical particles, since the table could survive certain changes in its particles or their arrangement” (158).

Extrapolating from Brink’s example, we may say that the statement “slavery is wrong” is a moral fact. Further, the wrongness of slavery does not depend on slavery occurring in a certain hemisphere, or during a certain time period, or between certain groups of humans. The wrongness of slavery survives all such changes, even though, in a way, its wrongness is

constituted by, and realized through, these natural and social facts. In this sense, Brink is correct to draw attention to the intermingling of natural and moral properties in every matter of moral fact. However, I believe Brink is incorrect to conclude that, because of this intermingling, moral properties are therefore constituted by natural properties. What is unclear to me is whether Brink's mistake is a conceptual error, or simply due to his ambiguous phrasing.

One consideration that leads me to believe that Brink may be committing a conceptual error is in his failure to identify what distinguishes a moral property from a natural property. Brink correctly states, "the is/ought gap presupposes a distinction between moral terms/senses/statements and non-moral terms/senses/statements." However, he then continues to say, "I know of no *criterion* for making this distinction" (146-7, emphasis in original). I have already mentioned what I believe to be the criterion for this crucial distinction: facts and norms play radically different roles, to the extent that only norms can give one a reason for action, or reach an evaluative conclusion. Granted, humans may have never realized the wrongness of slavery if slavery had never occurred in different hemispheres, during different time periods, between different groups of people. But that does not mean that these natural properties generated or constituted the wrongness of slavery, in the same way that natural particles generate and constitute tableness.

The moral fact concerning the wrongness of slavery tells one what to do or think about slavery (though it does not necessitate that one act in accordance with it). Slavery's wrongness does not depend on the fact that barbed-whips cause pain, that families dislike being separated, that humans derive more pleasure from being able to pursue their own projects rather than being coerced to perform those of another, and so on. The moral fact of slavery's wrongness depends on a whole host of moral arguments (i.e. oughts) concerning human freedom and equality, none

of which depend on any single or set of natural or social facts. As such, it becomes non-sensical to say that such natural or social facts have constituted the relevant moral principles.

Moral and natural facts will always come packaged together. One cannot observe an infant being tortured for pleasure, without immediately recognizing the moral wrongness of such an act. But its wrongness is not caused by the infant's squirming or helpless cries, but by a host of norms concerning innocence, punishment, responsibilities to children, and objects from which pleasure can be legitimately derived. To presume some sort of generative or causal relationship between the moral and natural properties at play, as Brink does, is to misunderstand the independence of the ethical realm. Ethical norms do not depend on natural properties.

In the end of his analysis, Brink muses that non-naturalism is not as absurd as it is generally thought to be, since such an approach seems capable of establishing moral properties, albeit by an alternative route to that taken by naturalism (162). However, Brink favours a naturalistic approach for two reasons. Firstly, because naturalism acknowledges the intermingling of moral and non-moral properties in every moral matter. Secondly, because ethical naturalism is not undermined by the is/ought distinction.

The reason that Brink believes ethical naturalism is not undermined by the is/ought distinction is because he believes naturalism can merely claim a constitutive relationship, rather than one of identity, between moral and non-moral properties. However, I have shown that his constitutive relationship between moral and non-moral properties is better understood as a non-causal/non-derivative relationship. Furthermore, I have shown that, not only is a non-naturalistic approach compatible with the intermingling of moral and non-moral properties in every moral matter, but, by reframing this intermingling as a case of two distinct properties being packaged together, it even explains this intermingling better than does naturalism.

I am drawing a different conclusion than does Brink: I conclude that the is/ought distinction undermines ethical naturalism. Yet, I am not sure that, in doing so, I am disagreeing with Brink. This is because Brink's ethical naturalism is not a genuine naturalism per se. For Brink, goodness is not *within* any natural properties. Nor is goodness *of* natural properties—only in a causal sense. Goodness would still have to be justified non-naturalistically. As such, Brink is not making the same question-begging mistakes of the substantiators. Brink, then, only feels that he must hold on to naturalism because of two mistakes.

The first mistake is that non-naturalism cannot account for the intermingling of moral and non-moral properties. The careful reader will have noticed that my selected quotations from Brink reveal that he consistently refers to the is/ought distinction as the is/ought gap. Once again, I feel vindicated in my assertion that referring to the distinction between *is* and *ought* as a gap encourages the misconception that facts and norms cannot be packaged together, and serves to obscure that each plays different roles. This seems to be precisely what Brink has overlooked.

The second flows from the first mistake, as the first mistake led him to the conclusion that non-moral properties constitute moral properties. The second mistake is the failure to appreciate the independence of the ethical realm. The independence of the ethical realm means that one cannot speak about the ethical realm without making substantive moral claims. In other words, moral principles are *sui generis*. However, the circularity of morality is no more threatening to its objectivity than is the same circularity in the case of the natural sciences. Brink himself realizes this when he says, “a kind of non-naturalism will then be equally true about any other discipline; that is, the facts and properties of every discipline will be ontologically independent and, hence, *sui generis*” (164).

At this point, Brink's almost inexplicable need to hold on to naturalism is reminiscent of R&M's. That is, all three of these authors have shown why a naturalistic approach to ethics is superfluous (if not mistaken), but continue to stand by it. Why is this? The answer is that they are wary of being wholly on the *ought* side of the is/ought distinction. They see that it possible to remain wholly within the ethical realm, but believe that doing so must somehow sacrifice objectivity. As Dworkin or Kramer would say, these authors refuse to take ethics seriously by thinking "that some external buttressing is needed" in order to support ethics (Kramer, 2009: 2). However, establishing such external supports is impossible, as well as unnecessary.

I began this chapter by saying that remaining wholly within the ethical realm (i.e. on the *ought* side) is precisely what realism must do if it is to surpass the failures of evolutionary ethics. Before discussing how ethics achieves objectivity, I must briefly establish the independence of the ethical realm.

### *Oughts all the way down*

In moral philosophy, almost any examination—from the introductory text-book to the advanced article—begins by drawing a distinction between meta-ethics and substantive ethics. Meta-ethics is meant to denote that one is making claims *about* ethics, and not necessarily taking a position on day-to-day ethical problems *within* the domain of substantive ethics. Meta-ethical considerations, such as what is goodness or how might morality be objective, are also called second-order questions. Substantive ethical considerations, such as should I hit my children or follow through on repaying my debts, are also called first-order questions. Dworkin (2012) calls the (mistaken) view that there is such a distinction between meta-ethics and substantive ethics the Archimedean view. This is because it assumes that there is a "non-moral foothold in the

moral realm,” from which one can speak about ethics without being within ethics (2012: 72). But it is a misunderstanding to believe that ethical claims can be grounded in non-ethical foundations.

“[T]he objectivity of ethics is itself an ethical matter that rests primarily on ethical considerations” (Kramer, 2009: 1). Attempts to either ground or discredit the objectivity of ethics from a neutral, external vantage point are “misconceived and counterproductive.” Such attempts lead to the belief that, in the debate over the objectivity of ethics, the major issues under dispute are not themselves ethical matters. In reality, “those key questions concerning objectivity are not only about the domain of ethics but are also within it” (Kramer, 2009: 2).

Two questions arise after reading these two paragraphs. First, if there is indeed no genuine distinction between first-order and second-order questions, then why do so many philosophers suppose so? And second, if there is indeed no genuine distinction between first-order and second-order questions, then why is this the case?

With regards to the first question, I follow Dworkin and Kramer in assuming that the lack of distinction is overlooked because of the much higher level of abstraction at which second-order questions are presented and debated. I will only add to this explanation that those who believe in a distinction between first-order and second-order questions are also misunderstanding the is/ought distinction. That is because they bring metaphysical, cultural, or biological facts to bear on ethical questions, as if there is some connection. As we saw with Ruse, there is no such connection. Ruse’s supposed meta-ethical critique, launched from the non-ethical premises of EP, only had normative impact to the extent that it began in an ought. And, of course, although Ruse denied it, his meta-ethical critique ended in an ought as well (i.e. the substantive moral claim that there are no oughts: nihilism). One cannot critique the foundations of ethics while

leaving the substantive level untouched. The reason why this is the case leads us to our second question.

With regards to the second question, there are two simple reasons why there is no genuine distinction between first-order and second-order questions. First, all meta-ethical judgments rest on and presuppose moral judgments. Recall that this was also the case with Ruse: his meta-ethical critique assumed that one ought to base one's values on well-founded and coherent ideas. This is a substantive ethical claim. Second, all meta-ethical judgments have direct implications for behavior (Dworkin 1996: 92). Again, this was found to be the case with Ruse. Ruse was forced to turn his nihilism into a self-refuting "noble nihilism" in order to stem the behavioral implications of his meta-ethical judgment. Suffice it to say that there is no clear distinction between first-order and second-order questions, at least not as is commonly assumed. Any claim about ethics both presupposes an underlying ethical claim and must be supported by further ethical claims. It is truly oughts all the way down.

Thus, it is impossible to talk about the ethical realm without being wholly within it. Moral facts are "genuine features of our world that remain forever outside the purview of the natural sciences" (Kramer, 2009: 4). Moral facts tell us what we ought to do, and give reasons and justification for why we should behave as such. No descriptive science can ever do this. Indeed, that is the test: if it seems that some fact entails certain implications for one's behavior, then one is actually wholly within the ethical realm. As such, one must act accordingly, which means adopting a logic of inquiry that aims to justify and provide reasons. "[M]orality is a distinct, independent dimension of our experience, and it exercises its own sovereignty" (Dworkin, 1996: 128).

There is simply no way to establish a normative proposition other than through substantive moral arguments. All meta-ethical claims constitute normative propositions, just at a high level of abstraction, which often serves to conceal their normative content. Brink, in the very first pages of his book, seems on the verge of realizing this. Commenting on the distinction between first-order and second-order questions, he says, “this distinction is primarily between levels or degrees of abstraction among normative issues” (1989: 1). This is the correct view.

However, he continues that “it is an important distinction,” as “[s]econd order, or meta-ethical issues, are issues about, rather than within, morality, and typically take the form of metaphysical, epistemological, semantic, or psychological issues about morality and our moral claims.” As examples of such second-order questions he offers: “Are there such things as moral facts or truths? Can we justify moral judgments?” (1989: 1). The raising and answering of these questions cannot but take place wholly within the ethical realm. Brink is wrong to conclude that, because his book is concerned with second-order questions, and because “[f]irst order, or normative issues, by contrast, are issues within morality,” that his book therefore “does not directly address substantive moral questions” (1989: 2).

If the reasons for Brink’s mistake are not evident now, they will become clearer in my subsequent discussion of objectivity in non-naturalism. Brink’s mistake makes him think non-ethical premises can shed light on ethical claims, and therefore keeps him from recognizing the independence of the ethical realm. Because Brink is so close, and his view of both the distinction between moral/non-moral properties and first/second-order questions seems to flip-flop, his view seems almost salvageable, as I have argued above. However, for evolutionary ethicists, both the substantiators and skeptics, their failure to appreciate the is/ought distinction, and the corollary of the independence of morality, spells ruin for their theories.

In sum, in order for the independence of the ethical realm to be threatened, it must be shown that meta-ethical claims do not assume substantive moral claims or directly impinge on moral action and evaluative conclusions. However, this seems to be a very difficult, if not impossible, task. As Dworkin points out, the sheer difficulty of this task is likely why those who make anti-realist arguments always use “bad metaphors they never cash” (1996: 108). For instance, when Churchland describes moral philosophy as “floating” on a “sea” of mere speculation, or when Ruse asserts that realist arguments depend on values existing “out there” as part of the “fabric” of the universe. Although the sentiment of these metaphors is unmistakable, to the extent that they actually say anything at all, it is nigh impossible to figure out what they might be saying. Anti-realists therefore depend on erecting and knocking down their straw men before anyone can realize they have just either begged the question or contradicted themselves. Anti-realists do so because they cannot understand how ethics can possibly be objective within non-naturalism, and are wary of any circularity or mysticism. I now turn to how such worries are unfounded.

### *Reason*

I have asserted that moral facts are part of our universe, existing independently of our thoughts about them. According to a popular understanding of things that are a part of our universe and exist independently of our thoughts about them, such things must fit into the picture of the universe presented to us by the natural sciences. I maintain that non-naturalistic moral realism is entirely compatible with a scientific understanding of the universe, insofar as there is nothing supernatural whatsoever about moral facts. That said, moral facts cannot be viewed under a microscope, calculated in mathematical equations, collected in petri dishes, or somehow

otherwise discerned with the many tools at the disposal of the natural sciences. We have discredited the view that moral facts are just a type of scientific fact (i.e. nothing more than natural properties), and that moral philosophy should be considered as an “under-developed branch of science” (this is Sam Harris’ view, as well as other realists). There is no possibility of a moral science, in a normative sense. And yet, ethics can achieve objectivity. How can this be?

The answer is, in a word, reason. It is through reason, our capacity as human beings for moral reasoning, that we can ascertain moral facts and assure ourselves of their objectivity. And so it is reason, the as-of-late-much-maligned hero of ethics proper, that emerges as the protagonist of my thesis. But before I can explain reason’s role, I must explain what reason is.

As simply as possible, reason is a way of thinking. In fact, it is the only way to genuinely *think*. Reason constitutes the fundamental process of critical analysis, from informal problem solving to abstract, theoretical parsing. As such, reason entails certain principles, or rules. Such rules might include: that full descriptions of something are, *ceteris paribus*, preferred to partial descriptions. Or that self-defeating positions ought to be abandoned (see Finnis, 2011: 74-75). These, and more, are the rules according to which reason operates.

Once we understand these rules, we understand that one cannot be rationally skeptical about reason. This is because skepticism must be a process of theoretical thinking. Therefore, any attempt at rational skepticism of reason presupposes this process of theoretical thinking, such that the principles, rules, and laws ostensibly scrutinized are simultaneously used in the process. Another way of illuminating this paradox is by saying that one cannot be rationally skeptical about reason because one would then have to be rationally skeptical about the way in which one was rationally skeptical about reason and then, necessarily, rationally skeptical about how one was rationally skeptical about being rationally skeptical about reason. And so on, *ad infinitum*.

As humans, we are trapped within the cognitive cage of reason. But this is not a bad thing. Why would someone think it is a bad thing? For the same reason that, at first glance, it seems to be a bad thing that we cannot judge morality from outside of morality: circular reasoning. Such a worry fails to distinguish between circular reasoning that begs the question, and circular reason that is so based on extensive justification. In the case of reason, I believe this worry is based on two specific mistakes. First, because of a failure to distinguish between process and product. Second, because of a failure to distinguish between elements of a process and the process itself.

As stated above, reason is a process—the process of thinking. It is through this process that we grapple with questions and problems, and are consequently able to discover explanations and solutions. Maintaining that we cannot be rationally skeptical about the process of reason is not the same thing as saying we cannot be rationally skeptical about the products of our reason (i.e. our explanations, solutions, etc). Certainly, in order to properly be rational, we ought to be rationally skeptical about the products of our reason. The inability to be rationally skeptical about reason itself does not mean that the products of reason are infallible.

Further, the inability to be rationally skeptical about reason itself does not mean that the process of reasoning is infallible either. Thus, even though we cannot be rationally skeptical about the process itself, we can be rationally skeptical about elements of the process. An example of this is reflecting on whether our decisions were influenced by too much emotion (or not enough), or if each variable in the mental equation was accorded its appropriate importance, etc. Again, in order to be properly rational, we ought to be rationally skeptical about each element in the process of reasoning, even though we are unable to be rationally skeptical about the process itself.

I have now explained what reason is. Further I have shown that we cannot step outside of reason, to somehow test it from outside itself, but that this does not pose a problem for our rational beliefs. I have previously established that we also cannot judge morality from outside itself. Now, I need to show that this does not pose a problem for the objectivity of moral facts.

What might I mean when I say that “I believe torture is wrong”? Furthermore, what if I added: “Not only do I believe torture is wrong, I know it to be wrong. Its wrongness is objective, universal, and absolute, independent of mine or anyone else’s thoughts on the topic”? Is there anyway to make sense of these propositions? And is there anyway I could actually be correct in making them?

### *Non-cognitivism & Skepticism*

One way of trying to understand what one means when one makes moral claims is outlined by non-cognitivist theories. According to non-cognitivism, moral claims are not properly understood as propositions about one’s beliefs (Sayre-McCord, 2006: 48). Rather, moral claims simply assert preferences and aversions. Hence, moral claims have “no cognitive” content. Thus, when I say “torture is wrong,” I am merely stating my aversion, albeit a strong one, towards such acts. Moral beliefs, then, are matters of taste.

I have established that we cannot make moral claims from outside the ethical realm. This, then, leaves non-cognitivism two options: it either presents a descriptive statement or a normative one—both of which are self-defeating. If descriptive, non-cognitivism seems absurd. It is self-evident that when people say “torture is unjust” or “abortion is wrong” or “the rich have an obligation to the poor” that they do not imagine themselves as expressing the same sentiment

as “salty foods are unpleasant” or “croquet is a lame sport.” This then leaves the normative thesis.

If non-cognitivism is making a normative claim, it seems equally absurd. That is because, properly understood, non-cognitivism asserts that people *ought* to mean “I think slavery is wrong” as equivalent to “I think ballet is boring.” In other words, non-cognitivism is arguing that one ought to understand one’s ethical claims as voicing one’s preferences. But in so doing, non-cognitivism defeats itself, because it cannot justify why people ought to understand their moral beliefs as preferences. Non-cognitivism can only say that such a view happens to be its preference. Thus, non-cognitivism seems committed to either one of two paradoxical claims. First, that people are thinking what they are clearly not thinking. Or second, that moral claims do not have cognitive content, but that non-cognitivism, which is itself a normative claim, has cognitive content.

Perhaps I have been too quick to dismiss non-cognitivism. After all, it has one more argument up its sleeve, the same used by Hume and Mackie. That is, that truth does not provide motivation to act. Only conviction motivates, and conviction is based on desires, not necessarily caused by truth. Therefore, the moral claims that we believe to be objectively true are only based on our desires, not reason. This is the Humean/Mackian non-cognitivist argument.

Upon what assumption does this argument rest? For starters, it assumes that “in making a genuine moral judgment we are expressing a motivational state” (Sayre-McCord, 2006: 51). It then assumes that “motivational states are distinct and different from beliefs” (Sayre-McCord, 2006: 51). Thus, it concludes, since moral claims express a motivational state, moral claims “must express something other than beliefs” (Sayre-McCord, 2006: 51). And if moral claims do

not express beliefs, but desires, they are not reporting facts, and so cannot be true or false. How does a realist respond to the anti-realist and skeptical conclusions of this argument?

One possible response is to agree that moral beliefs do express motivational states, but deny that beliefs are distinct from motivational states. This allows realists to maintain the causal impact hypothesis (CI). CI stipulates that moral truth does indeed cause one to hold moral convictions aligned with that truth (Dworkin, 2012: 70). That is, the inherent wrongness of slavery not only caused me to think it was wrong, but to avoid such acts. Many realists agree with CI. What is so attractive about CI is that, if it is true, a causal explanation of why one holds a moral belief will also be a sufficient justification for the veracity of that belief. Such a state of affairs would parallel that found in the natural sciences, where an important aspect of the justification of why I believe gravity makes my pen drop is simply the causal fact that every time I lift my pen up and open my hand, my pen drops. Some realists fear that if the ethical realm cannot mesh explanation and justification in this way, then causal explanations of why we have come to our beliefs undercuts our separate justifications for why we think those beliefs true.

This idea, that unless CI is true, one has no good reason to believe one's moral claims are correct, is called the causal dependence hypothesis (CD). Some realists think CI is true, while anti-realists, operating on their Humean/Mackean view, deny CI. The realists who believe CI also believe CD. And anti-realists also believe CD, which is why they think they have proved moral realism wrong. I follow Dworkin (2012, see 69-82), in finding both CI and CD to be wrong.

Notice that CI is a scientific claim, within the descriptive realm. Scientifically, CI sounds ludicrous. However, whether or not it is true hardly seems to matter as far as moral realism is concerned. CI is therefore an unnecessarily risky way to defend realism, for at least two reasons.

Firstly, because it is contingent on a host of dubious scientific claims about how the brain works. Secondly, because it encourages the view that if truth does not cause conviction, then there is no reason to believe in moral truth, and thus no grounds on which to reject skepticism (Dworkin, 2012, 71). Thus, CI should be abandoned, and whether science proves it true or false matters not. Even if CI were true, it would make no difference, since (because of the cause/reason distinction) it would not help in justifying our beliefs as independently true! That is, even if it is established that truth causes conviction, we still need to justify why the truth is actually true.\* Once the premises CI rests upon are disproved, CI is abandoned, and the Humean/Mackean critique evaporates. Moral truth does not have, nor does it need to have, “to-be-pursuedness” built into it (Mackie, 1977: 40).

CD is what matters, and CD is a substantive moral claim about what counts as a sound reason for holding certain beliefs. CD makes the mistake of assuming some connection between causal explanations and rational justifications. However, as Woolcock realizes, “[t]here is as much a ‘reason/cause’ gap as there is an ‘is/ought’ gap” (1993: 435). Indeed the former logically derives from the latter, and is equally as sound.

The popular misconception that causal explanations for normative judgments nullify the “truth” of the latter is nicely spelled out by the anti-realist philosopher Susan Street. Street correctly states that one’s “normative judgments [...] hav[e] been shaped by causes such as [one’s] upbringing, cultural background, and inherited psychological tendencies” (2013: 1). Street also correctly states that, had some or all of these factors been different, one would not

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\* I will later use a similar argument to show that even if our moral beliefs were 100% biologically determined, this would not undercut their objectivity.

hold the same normative judgments. Thus it is very true that our normative judgments are “inescapabl[y...] embedded in the world of cause and effect” (Street, 2013: 2).

However, Street is wrong to conclude therefore that our normative judgments are just accidents, and that “we cannot coherently view our normative judgments both as true *and* as subject to causal explanation” (2013: 2, emphasis original). If Street believes that we must choose between explanation and justification, in choosing explanation, she reveals that she thinks a causal explanation tells the whole story of why we hold a moral belief. In thinking this, Street is reminiscent of Ruse, whom, it will be recalled, claimed that once a causal explanation for a belief was given, that was that and a justification was irrelevant. My critique of Ruse focused on how his claim violated the is/ought distinction. Now, however, I focus on how this view also constitutes an incomplete and impoverished understanding of *why* we hold our moral beliefs. Its incompleteness keeps those who hold this view from realizing how our moral claims can be *both* causal accidents and objectively true.

I begin my disproof of CD, and its skeptical conclusion, in the same way Dworkin does: by recognizing CD to be a self-refuting moral claim. When CD is applied to the moral realm, it becomes a moral claim. CD stipulates something like “it is wrong to act on the basis of moral judgments best explained through one’s personal history rather than encounters with the truth.” However, if we accept CD as a moral judgment, we immediately realize that we do not accept it because of any encounter with the truth, but for further moral reasons. Thus, “CD undermines any possible reason for accepting CD” (Dworkin, 2012: 77).

But more should be said concerning CD’s wrongness. That is because we still feel haunted by the idea that if one’s personal history explains the beliefs one holds, without playing

any explanatory role in the truth of those beliefs, then one cannot have confidence in one's beliefs. Such a fear is unwarranted. To realize this, consider the following thought experiment.

Imagine on Monday you believe, as you have all your life, that eating meat is morally permissible. On Wednesday, however, you find that your views have changed. You now find arguments for vegetarianism much more convincing. You change your diet, and condemn the consumption of meat as morally heinous. Sometime later, scientists realize that radioactive rain has caused thousands to change their views on the permissibility of eating meat. The tests are conclusive: everyone exposed to this radioactive rain, no matter their views beforehand, ends up thinking vegetarianism is the way to go. Suddenly, you realize that you were caught in the rain last Tuesday, beside the nuclear plant. There is no doubt that this is the reason for your new-found vegetarianism fervor. How arbitrary! If you had packed an umbrella, you would not think eating meat is wrong, causally speaking.

However, is this any reason to not be confident in your new views, and to presume them wrong? You proceed to subject your new views to all your once-held beliefs. You consider all possible arguments, musing over everything from cramped chicken cages to the workings of the human digestive system. Try as you might, you can find no reason to doubt the soundness of your new views. Granted, the causal explanation behind your vegetarianism is different from those vegetarians who had a raincoat. But this just goes to show that the causal explanation is irrelevant to *why* you hold your views. What matters is the reasons, not the causal explanation behind the reasons. Proving that such a justification process affirms the objectivity of moral judgments is what I turn to now.

## *Cognitivism & Objectivity*

According to cognitivists, when one says, “I think torture is wrong,” one believes oneself to be stating a proposition about how the world is, in a normative sense, i.e. a moral fact.

According to realists, such propositions can be true (or false). When they are true, they are true independent of anyone’s desires or thoughts about them. This is what is meant by “objectively” true: that such truths have an objective existence independent of human thought.

This type of objectivity is known as mind-independence. Mind-independence can take a weak form or a strong form. Weak mind-independence indicates that the facts of some matter transcend the beliefs or attitudes of any given individual (Kramer, 2009: 24). This weak form of mind-independence allows for facts to be derived from the beliefs of individuals who together form a decisive group. For instance, if I lived in China during the 1960s, the moral fact that it is wrong to have more than one child is a moral fact that transcends my beliefs or attitudes on the issue. Within the group I am a part of, my personal desires to have a large family or my belief that to do so is my choice, do not change the fact of the matter that the interactions of my group (legal, economic, cultural, etc.) have made it decisive that only having one child is the way to go.

Strong mind-independence goes further. According to this view, group decision or consensus “is neither necessary nor sufficient for the actual bearings of the specified state of affairs” (Kramer, 24). Accordingly, it would not matter if I were the only man in China who believed the one child policy was wrong. Indeed, even if I believed it was right, as did all the scientists and moral philosophers who had been gathered to deliberate on the issue, its certitude would not be established. Such an overwhelming consensus might be indicative of truth, but it in no way guarantees it.

A last type of mind-independence is existential. Existential independence is when a property's continued existence does not depend on the occurrence of mind activity. For instance, all natural products, including those made by humans (i.e. they *once* depended on the occurrence of mental activity for their existence, but no longer do) are existentially mind-independent (Kramer, 2009: 26).

I follow Kramer in concluding that the correct principles of morality have a strong, existential mind-independence. That is, the "continued existence [of the] correct principles of morality does not depend on the continuation of the mental functioning of any people individually or collectively" (27). For instance, Kramer's example that torturing babies for pleasure is wrong does not depend on the existence of beings with minds who are about to engage in such acts, nor does it suppose that any such act has occurred or will occur. Regardless, however, its wrongness exists, as it does not hinge on such things.

The correctness of the basic principles of morality does not lie beyond those principles themselves. In particular, their correctness does not hinge on an individual's or group's consent, or any other external factors. "The correctness of the principles of morality are not in need of any foundations beyond themselves" (Kramer, 2009: 46). Their correctness is self-justifying, which is to say derived from the other principles of morality. Why and how might anyone disagree with this conclusion?

Brink states, "there are no beliefs that are *self*-justifying" with regard to substantive ethical claims (1989: 116, emphasis in original). In stating this, Brink is both correct and mistaken. First, why he is mistaken. Brink's mistake in denying the self-justification of substantive moral claims is traceable to his deeper mistake of drawing a distinction between first-order and second-order principles.

According to Brink, in order to be holding a belief ( $p$ ), one must have a reason to hold  $p$ . However, if  $p$  is a first-order belief, this implies that one's reasons for holding  $p$  are based on second-order beliefs about  $p$ . Thus, this dependence of  $p$  on second-order beliefs shows  $p$  cannot be self-justifying (see Brink, 1989: 117).

If Brink were to realize that any possible second-order belief on which one has based  $p$  is itself a substantive ethical claim, about what kind of belief  $p$  is and why it is worthy to hold, he would see that ethical claims are only being justified by further ethical claims. Thus, ethical claims are self-justifying in the sense that they can only be justified by other ethical claims, and are fully justified once this is accomplished.

How is Brink correct? Brink is correct to point out that “no belief about the world can also be the reason for thinking that belief is true” (1989: 117). But since ethical objectivity is based on inferential justification, wherein every belief is justified upon another, no belief aims to justify itself in such a tight, vicious circle. If ethical justification were not inferential in this way, then Brink would be correct to qualify such self-justification as “the smallest justificatory circle imaginable,” and thus “non-explanatory and, hence, non-justifying” (116). As it is, ethics is all about large (very large) justificatory circles in an attempt to justify and explain oneself. I will now explain how such coherent circular reasoning can achieve an objectivity for our moral facts that parallels the objectivity of facts in the natural sciences.

### *Coherentism*

According to coherentism, one's belief is justified if: (a) it is part of a maximally coherent system of beliefs; and (b) the belief's coherence with the system at least partially justifies one's holding it (Copp, 1991: 618). In other words, if I hold belief  $p$ , and  $p$  is part of a

coherent system of beliefs that themselves help to justify  $p$ , this is evidence of  $p$ 's objective truth.

But what does "objective truth" really mean in such a context?

Objective is simply meant to denote that  $p$  can be considered a fact, be it of the moral or empirical variety, that exists independent of one's beliefs. Of course, such coherence does not guarantee truth. But just because it does not guarantee truth, it in no way follows that such beliefs are unreasonable, or that one is not justified in holding them. The status of such beliefs reflects our scientific, as well as moral, facts. In order to show this, I must prove that the coherence of a set of beliefs can provide evidence that such beliefs are independent matters of fact.

The fear of coherentism is that it is circular. In order to defend coherentism, we must distinguish between what Brink calls "contextual" justification and "systematic" justification." In contextual justification, "the premises used in justifying a proposition are taken for granted or assumed to be justified" (Copp, 1991: 618). In what is called systematic, complete, or absolute justification, "no premise can be taken for granted, and every premise used in a justification must itself be justified" (Copp, 1991: 618). As Copp concludes, "[s]ince no premise is taken for granted in a systematic justification, any circularity involved in a systematic coherentist justification is benign" (1991: 618).

Of course, in most cases, we use contextual justification, as we are seldom in a position where we cannot take anything for granted. As such, even a biologist or physicist relies on simple contextual justification, as they will take the existence of an external reality to be studied as a given (Copp, 1991: 619). However, if push comes to shove, the natural sciences are based on systematic justification. The universe is tested according to the tools and methods of the scientific method. And the tools and methods of the scientific method can only be tested

themselves by other tools and methods of the scientific method, and so on. Just as such circularity does not threaten the existence of scientific facts in the natural sciences, neither does it threaten the existence of moral facts in the ethical realm.

“The epistemology of any domain must be sufficiently internal to its content to provide reasons, viewed from the perspective of those who begin holding convictions within it, for testing, modifying, or abandoning those convictions” (Dworkin, 1996: 120). As Dworkin points out, this means that we cannot hold certain beliefs (e.g. astrological, religious, etc.) and then only affirm those methods that confirm those beliefs, while dismissing other methods. Coherentism is not about protecting one’s beliefs from scrutiny, quite the contrary. If one’s beliefs make certain causal claims, as many traditional astrological and religious beliefs do, then they are within the domain of the natural sciences, and open to its testing. Some areas of philosophy, such as the philosophy of mind or language, might depend on causal claims, but ethics proper does not. Thus, the systematic coherentism of non-naturalistic moral realism does not aim to never test moral beliefs, but to ensure that they are subject to tests appropriate to the nature of the ethical realm, i.e. *oughts*.

Now, we are prepared to answer what I mean when I declare that “I know torture to be objectively, universally, and absolutely wrong.” Such a proposition means to convey that my belief in the wrongness of torture is not meant to express a personal taste or feeling—it is something I know. My belief is arrived at through reason, and justified by similarly rational beliefs. Its truth is independent of mine or anyone’s attitudes about it, its truth applies to all people in similar circumstances, and, as far as I can tell, there is absolutely no good reason to doubt its truth. “And if a proposition seems to be correct and could never be coherently denied, we are certainly justified in affirming it and in considering that what we are affirming is indeed

objectively the case” (Finnis, 2011: 75) This puts moral facts at a similar status as scientific facts. Thus, if my above analysis is sound, we can also answer whether or not I could ever be correct in making such moral claims: yes!

The following three conclusions have been established. First, that there is no external substantiation or skepticism of ethical matters. All ethical inquiry must take place within the ethical realm. Second, the achievement of internal ethical objectivity is possible. Moral facts can be established within the ethical realm, which enjoy the same status as do scientific facts in the physical realm. Third, any objectification within the ethical realm must take place according to its logic of inquiry. Moral facts are only reached and assured through moral argument, i.e. the providing of reasons as justification for one’s beliefs.

In the next chapter, I will argue that these three conclusions secure moral realism immunity from any critiques launched from EP. However, before turning to that, I will briefly examine one common form of internal skepticism that takes aim at my realist conclusions. Mitigating this challenge helps complete the portrait of moral realism that I aim to present.

#### *Indeterminacy vs. Uncertainty: The Default Thesis*

Sometimes when debating moral matters, one might say that there is no correct answer to whether or not a certain act is just or unjust. Such claims need not take the form of external skepticism, which I have shown to be impossible. Such “indeterminacy” arguments admit to being wholly within the ethical realm. One who says there is no correct answer to the abortion debate, or the vegetarianism question, or the affirmative action issue, can also affirm that other moral positions, like the wrongness of torture, can be adequately settled. In such a case, one would be stating something along the lines that the arguments on either side of debates are no

better than each other. Conceived in this way, I believe that these “no right answer” indeterminacy arguments can sometimes be legitimate. The question we need to answer, however, is *when* is indeterminacy legitimate?

There is a common misconception that indeterminacy can legitimately constitute the default position in ambiguous moral matters. That is, that if after conscientious study and extensive reflection of all the relevant arguments on some matter, one is not persuaded either way, the reasonable conclusion is that there is no right answer to the question. The default thesis thus stipulates that if one does not have any stable stand on the moral status of abortion, but instead finds oneself flip-flopping between claims, the responsible thing to do is recognize that there is no objectively true answer on this matter. As Dworkin points out, “[t]his approach assumes that though positive arguments are necessary to establish positive claims about moral issues, one way or the other, failure to find such positive claims is enough to support the indeterminacy thesis” (2012: 91). However, the default thesis, when applied to indeterminacy, amounts to “a general denial of all apparently eligible positive propositions” with regards to the matter at hand (Dworkin, 1996: 129). In other words, indeterminacy is a positive claim about the correct conclusion to draw on the basis of other positive claims.

That indeterminacy is a positive claim allows us to distinguish it from uncertainty, which is not a positive claim. To conclude that one is uncertain whether a proposition is true or false is compatible with one believing that it is either true or false, and, objectively speaking, it being either true or false. However, declaring that that a proposition is neither true nor false is clearly incompatible with it being either true or false. As such, uncertainty is a much less ambitious stance, and is therefore the legitimate default position. In order to render indeterminacy

legitimate, a case must be made for why it is the case that there is no right answer in a given situation.

For instance, say that I am agonizing over whether to pursue my PhD or return to work on a cattle ranch full-time. I would no doubt struggle to determine which life would make me happier, where I would be most successful, or be doing the more meaningful work. It would be extremely difficult to weigh these questions and their answers in my final decision. Imagine that someone tells me I am foolish to strain myself with such questions, as there is simply no right answer to which lifestyle is the better choice for me. Dworkin is correct to point out that this may be true (1996: 136). However, such a conclusion needs no less an argument than does an endorsement of either side. Indeed, it seems such a conclusion would require an even more complex argument than either side. Saying something to the extent that “there are many values, and that they cannot all be realized in a single life” falls much too short, a copout (Dworkin, 1996: 136).

Initially, the default thesis, when applied to indeterminacy, seems to pose a problem for moral realism, as it introduces a form of internal skepticism that claims there are no right answers for many complex moral matters. However, once indeterminacy and uncertainty are distinguished, we realize that it is actually moral realism that presents a challenge to indeterminacy. This is because moral realism reveals indeterminacy to be an ambitious positive claim, requiring support. Granted, indeterminacy may be warranted in some cases. But it is “premature [at best] to suppose that positive arguments for indeterminacy are always available when people are deeply uncertain” about ethical propositions (Dworkin, 2012: 94). Moral realism is compatible with uncertainty.

I end this discussion with a brief comment on the role of uncertainty in moral realism. It may be the case with both scientific and moral facts that certain laws and principles will forever remain beyond human comprehension. In the case of natural laws, they will govern our behavior whether or not we ever become aware of them. However, with regard to moral facts, humans cannot be beholden to moral rules that are beyond human comprehension (Kramer, 2009: 54). Notice that this is both an abstract ethical-epistemological proposition, at the same time that it is a substantive moral claim, resting upon further moral claims concerning the rules according to which individuals ought to be judged. Lastly, ignorance of moral facts does not save especially backward individuals, or communities, from being blameworthy. In order for moral rules to apply, they need only be discernible to rational agents under optimal conditions (Kramer, 2009: 54-56). (I follow Kramer in using the word “optimal,” rather than “ideal,” which implies a sort of unrealistic perfection.) It does not follow that one must understand the rules one has violated in order to be blameworthy. In other words, the “ought-implies-can” thesis, endorsed by Sober (2000: 1999), is far from unlimited.

### *Conclusion*

This concludes my discussion of the doctrine of moral realism. Though it may be somewhat brief and incomplete, enough has been established in order to show both how realism corrects the mistakes of evolutionary ethics, and why the mistakes of evolutionary ethics are indeed mistakes. At this point, then, the approach to ethics, advocated by my non-naturalistic variant of moral realism, has emerged as the remedy for the maladies of evolutionary ethics. Although I have established why ethics proper is, in an important sense, detached from EP’s claims (i.e. due to the independence of the ethical realm), a few of EP’s skeptical claims have yet

to be dismissed. In the next and final chapter, I briefly scrutinize three potentially seductive skeptical arguments launched from EP. The final goal of this thesis is to establish a framework through which we can relate EP to ethics. In order to secure firm intellectual ground upon which such a framework can be erected, these potential penultimate problems must be addressed.

## Chapter Six: Realism's Immunity from External Skepticism

### *Introduction*

I have presented the is/ought distinction as the question around which this whole thesis revolves. My response to the is/ought distinction has been to argue for the independence of the ethical realm, and the possibility of moral facts within it. I have argued that evolutionary ethics fails to appreciate the independence of the ethical realm. Evolutionary ethicists try to breach the ethical realm through one of two broad prongs, each of which contains sundry different strategies, and all of which fail. I have called this the *Anna Karenina* problem of evolutionary ethics, that is, all attempts at an evolutionary ethic fail for the same reason, but each fails in its own way. Only morality can breach morality. Given the preceding critique of both prongs of evolutionary ethics, this chapter may, at first glance, seem repetitive or superfluous. However, it is neither. It is not repetitive because the three EP arguments examined below have yet to be presented. And it is not superfluous because these three arguments specifically take aim at the doctrine of moral realism that I have just articulated above.

I have argued that a biological/materialistic bias and the corollary of reductionism constitute threads that originate in EP and continue into evolutionary ethics. EP works according to a descriptive logic of inquiry. That means evolutionary ethicists, both substantiators and skeptics, base their claims on descriptive statements. With regards to skeptics, their critiques adopt the strategy of a genealogical critique. Such critiques “always begin with an empirical hypothesis about the origins of our beliefs in a given domain [e.g. morality], and proceed to raise enough doubts about the reliability of those origins that the ensuing beliefs are claimed to be unwarranted” (Shafer-Landau, 2012: 2). The idea is that we “can reveal the likely falsity of a

given belief by showing that its origins are of a kind that we know to be typically distorting” (Shafer-Landau, 2012: 2). This idea depends on showing that, with regard to certain topics, there is no connection between the origins of a belief, and the truth of that belief. The lack of such a connection would give us reason to understand those origins as “typically distorting” and the resulting beliefs as “likely fals[e].”

Do the evolutionary origins of our morals have a distorting origin, according to this understanding? I believe the correct answer is yes. Evolution by natural selection is concerned with adaptation. Natural selection is not concerned with truth. Suffice it to say, then, there is no discernible connection between ideas selected for adaptation and the truth of those ideas. The second question now becomes, do our moral ideas indeed have evolutionary origins? Again, I believe the correct answer is yes. EP, in the descriptive realm, has done a commendable job of tracing the evolutionary origins of many of our moral beliefs. The problem for moral realism is clear: if there are indeed moral facts, independent of human thought, and human thought is itself the product of a process unconcerned with reaching those independent moral facts, how can we be confident in our moral beliefs?

This question is multi-faceted, and the problem it poses is a serious one. Firstly, in posing this question, skeptics are saying: “Natural selection has discriminated our (moral) beliefs towards adaptation rather than truth, so we have prima facie reason to be skeptical.” I call this “the discrimination argument” (DA). Secondly, skeptics are also saying: “Given all the possible moral beliefs, what are the chances we have landed on the correct ones? What luck, a miracle!” I call this “the many possibilities argument” (MPA). Lastly, skeptics are saying: “Given that natural selection discriminates towards adaptation instead of truth, and given all the possible moral beliefs, even if we land on the correct beliefs, it will be so by accident.” I call this “the

accidental argument” (AA). Each of these arguments is thus a separable element in the skeptic’s overall claim. I will now investigate each in turn.

### *The Discrimination Argument*

The first thing to notice about DA is that, when applied generally (i.e. not restricted to the relationship between natural selection and our moral beliefs), it certainly has merit. For example, say I told you that 47,725 people visited the local McDonalds this week. For all you know, that number is true. But if you ask me how I came to that number, and I tell you I counted the words in this thesis, then you have good reason to assume my number is wrong. This is because there is no discernible connection between the origins of my number and its truth. Similarly, EP-ers argue that there is absolutely no discernible connection between the adaptability of belief (i.e. its origin) and its truth. On this, I agree whole-heartedly with the skeptics.

One realist strategy for defending against DA is to ask, if the evolutionary origins of our moral beliefs throw their truth in doubt, then why not our scientific and mathematical beliefs as well? Surely, such realists say, skeptics do not mean for their genealogical critique to lead to wholesale skepticism. And since we use the same evolved brain for all our thinking, yet do not doubt  $2+2=4$ , DA is flawed. However, I believe this realist counter is itself flawed, and DA still has merit.

This is the strategy of Robert Nozick (1981) and John Lemos (2000), among others. Nozick uses the example of a speeding train coming at us (see Nozick, 1981: 155-156). We perceive this threat with our eyes and ears, which are evolutionary adaptations, but we do not therefore doubt the existence of that train, and we get out of the way. In order to show that Nozick’s analogy is not a true one, Ruse (1993: 156) counters with his own thought-experiment:

imagine two worlds, one with a train, one without. In the world without a train, the evolutionist is not committed to saying one would nonetheless believe in a train. That is because the independent existence of the train is assumed in order to make Nozick's analogy work. Ruse continues: Imagine two worlds, one with objective moral facts, one without. The evolutionist can explain why, in both cases, one would nonetheless believe in objective moral facts. This is because moral facts do not exist independent of us, but emerge from our desire for them to be true. In other words, there is good reason to believe that the discriminating pressures upon our moral beliefs have been stronger than those on other beliefs.\*

Lemos utilizes the thought experiment of Pythagoras gleefully running to show you the results of his work on triangles (2000: 216). Just because you know Pythagoras desperately wants his equation to be true, does not mean you have reason to doubt its truth. However, I believe this is a failure on Lemos' part to truly appreciate the depth of the skeptic's argument. Lemos has not distinguished between proximate and ultimate causes of behavior. Proximate causes of behavior are the conscious psychological reasons for a behavior. Ultimate causes of behavior are the underlying, often unconscious, biological reasons for a behavior (see Mayr, 1961). Granted, Pythagoras has proximate reasons for wanting his theorem to be true (e.g., fame, vindication, the pleasure of solving a puzzle, etc.), but he does not have ultimate factors skewing his thought towards a certain calculation. However, in the case of morality, we have the discriminatory power of both proximate and ultimate causes at work. The mother who believes it is a moral fact that she has an obligation to provide for the needs of her children before those of others has her proximate reasons, as well as unconscious ultimate reasons (i.e. ensure her genes

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\* I will return to Ruse's thought experiment below, because he makes an important blunder in it.

are reproduced into the next generation). DA thus retains merit. This disanalogy between moral beliefs and scientific beliefs with regards to DA has also been noted by Philip Kitcher (see 2005, p176).

Another counter strategy to DA is to try and show that all moral beliefs are not a product of natural selection. Advocates of this approach note that not all our moral beliefs can be said to be biologically advantageous. For example, the belief that it would be wrong to promote one's own kin to an important position if more qualified individuals have also applied for the job. Evolutionists show that such bias towards those who share our genes is an evolved adaptation, so any moral claims that deny its fairness cannot be biologically advantageous, and therefore are not a product of evolution. I believe there are a few problems with this counter to DA.

Firstly, just because a behavior is disadvantageous, does not mean it is not somehow indirectly caused by natural selection, in which case DA still applies. Secondly, just because a behavior *seems* disadvantageous, does not mean it definitely is. For decades, before Hamilton developed his theory of inclusive fitness, biologists were puzzled about how to fit altruistic behavior into the paradigm of natural selection (Wilson, 1975: 3). With Hamilton's discovery, that all changed, and EP's analysis of morality began anew. Thus, the question of which ideas are a product of evolution is ultimately an empirical question. For realists to wed their counter-arguments to DA on dubious empirical claims, which could be overturned at any time, is foolish and unnecessary. I believe the best response to DA is to accept it, insofar as the science supports it. The further flaws within the skeptic's claims are such that they show that whether DA is true or not is a matter of scientific curiosity, and has no bearing on the confidence we can have that our moral beliefs are true. This is because the skeptical implications of DA actually depend upon the soundness of both MPA and AA.

### *The Many Possibilities Argument*

MPA is meant to show that we should not have confidence in the truth of our moral beliefs, since, given the sheer number of possible moral beliefs, it would be miraculous if we ended up landing on truth. Ruse's arguments, as well as those of other skeptics, are full of thought-experiments like the following: We currently think the consumption of feces to be disgusting and wrong, yet, if we had evolved from ancestral cave-dwellers instead of savannah-roamers, we might have thought inter-feces consumption to be a splendid delight (Ruse, 2010: 308).<sup>\*</sup> Think of all our other possible values that could have ended up radically different! Should this shatter our confidence?

I believe MPA is seriously flawed. This is because there are not as many possible moral beliefs as it might at first seem. Street, for example, does believe that possible normative judgments are infinite. As she sees it, "for all our bare normative concepts tell us, survival might be bad, our children's lives might be worthless, and the fact that someone has helped us might be a reason to hurt that person in return" (Street, 2008: 208). Street continues to say that, of course we think these claims are false, "but the point is that if they are false, it's not our bare normative concepts that tell us so" (2008: 208). It is something else, namely our biology. But this is not the case. Street's failure to recognize that there are *necessarily* "wrong-making" features of, say, rape, genocide, and betrayal, reveals a failure to understand morality itself (see Shafer-Landau, 2012: 12). I will show that it is not question begging for me to say this.

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<sup>\*</sup> This example, contrary to what Ruse may believe, is far from shaking our confidence in our moral values. This is because our moral values include realizing when it is inappropriate to judge others according to our standards, especially in the case of other creatures. We do not find the weasel guilty for the wanton slaughter of rabbits, and we would not find these creatures wrong for the consumption of feces if we could understand it was a necessary adaptation for their survival.

It will be recalled that Richards correctly saw that philosophers often take commonly held positions as starting points. By not realizing that it is the justifications behind these common positions that interest philosophers, Richards mistook those positions as starting points in the sense that they were not justified further, and he mistook the utilization of those “starting-points” as an empirical exercise. The mistake Street is now making with regard to these commonly held positions is not realizing that at least many of them are indeed shown to be false by “bare normative concepts.” That is, “it is a pre-condition of our talking about morality that we affirm certain paradigmatically moral positions [...] these propositions are common ground that all competent speakers are entitled (indeed, required) to take for granted” (Shafer-Landau, 2012: 12). If this is the case, then using such reference-fixing moral points will not be a question-begging approach for the realist. How so? Because being skeptical about such positions would require climbing out of reason, that is, being rationally skeptical about reason, which we have previously determined is impossible.

I believe that when Ruse asks us to envision an alternate universe, one in which slavery is just, he is asking us to do something quite impossible. Don’t get me wrong, it is certainly possible to envision an alternate universe where slavery is *thought* to be just, but agents in such a universe would be mistaken about the status of slavery. It is another thing entirely to imagine a universe where slavery is actually just. This is impossible. This is the same as trying to imagine a world wherein water is not constituted of two parts hydrogen and one part oxygen. In all possible worlds, two parts hydrogen one part oxygen are necessarily part of “waterness.” Similarly, injustice is logically part of slavery. When someone asks us to detach slavery from injustice, we know they are no longer talking about slavery, but something else. Just as if someone asks us to imagine water that is not made out of two hydrogen molecules and one oxygen, we know they

are not actually talking about water. We require some logical reason to doubt the injustice of slavery in order to ponder such an alternative universe. Ruse gives no such reason, and just assumes the capacity to rationally do so.\* However, the task is an intellectual impossibility, and this skeptic strategy constitutes a cerebral sleight of hand. As such, any skeptical conclusions are simply conjured, and of no threat to realist arguments.

Because normative concepts are self-justifying, in the sense they are proved by other concepts, the range of actual possible moral beliefs may be quite limited. Skeptics rely on presenting an alternative causal story. However, our correctly finding X to be wrong does not depend on the causal story from which our believing X to be wrong has itself emerged. Granted, I think I ought to care for my children because my biology has produced this belief in me. But that is not *why* I believe I ought to. I believe so for reasons, and these reasons prove themselves true—their truth is logically inescapable. Our dependence on our reasons, our justifications, brings us to AA.

### *The Accidental Argument*

AA is meant to show that since some of our most cherished values are accidents, that our beliefs are only accidentally true. But AA thus conflates two different senses in which our beliefs can be accidents. The first sense of accidental is causally. Above, I disproved the argument that the (true) fact that our beliefs are causal accidents therefore undercuts our beliefs (with my acid

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\* An example of such a reason Ruse could give is: Imagine an alternative world where slavery exists, but all the slaves could not be happier about it, and everyone derives pleasure from the practice. This might convince someone that slavery could be just. But this would only show that such people value pleasure over fairness or freedom. Such people would be mistaken. Again, we conclude we have no way of coherently pretending something to be just that is unjust.

rain and vegetarianism thought experiment). I will now discredit the argument that those reasons themselves are only accidentally true.

The second sense of accidental denotes that the reasons for why one believes a true fact are bad reasons. For example, the man with the broken watch who believes it is 3:20 pm can only accidentally be correct (Dworkin, 2012: 112). In EP terms, AA states that, since evolution has shaped our moral beliefs in discriminating ways, we would continue to have the moral beliefs we do, even if they were false. AA may seem very similar to DA and MPA, but AA is specifically calling attention to the fact that “we are failing to form our moral beliefs in ways that are adequately responsive to the moral truth (Shafer-Landau, 2012: 16)

Shafer-Landau also calls this the “insensitivity argument.” Shafer-Landau distinguishes reliability from insensitivity. Reliability is a matter of generating true beliefs. Sensitivity is a matter of non-accidentally believing propositions when they are true, and non-accidentally dismissing them when they are false. He points out that insensitive beliefs can be reliable, such as when we correctly predict the weather based on the entrails of a sheep. AA is thus concerned with the *reasons* we believe something.

Richard Joyce (2006) uses AA to reach skeptical conclusions with his pill example: one takes a pill, after which one believes Napoleon was defeated at Waterloo, whether or not this was true (181-182). Joyce sees evolutionary influences on moral beliefs as analogous to his pill example. Knowing someone has taken the pill, we see that the way they reached their belief is insensitive. Similarly, knowing that we have reached our beliefs through natural selection, we see that we have reached our beliefs by an insensitive process, as evolution is concerned with adaptation rather than truth. Joyce is granting that there could be independent moral truths, and

that we might believe them, but given the insensitive process through which we have come to them, we have good reason to be skeptical of both possibilities.

Joyce's argument requires two conditions in order to be sound. First, that evolution is a process insensitive to the truth. This, I am willing to grant. Second, that the inability to exclude the possibility of discriminating forces in a set of beliefs warrants indefinitely suspending judgment on the truth of those beliefs (Shafer-Landau, 2012, 18). I have two objections to this second condition.

First, amazingly, Joyce fails to realize a mistake in his pill analogy: whereas the pill is 100% effective in producing the belief that Napoleon was defeated, no EP-er claims that evolution has the same power over our thought. As Bradley Thayer notes, biological determinism is a notion that EP-ers continually find themselves defending against, even though none of them subscribe to it (2004: 6). Since Joyce surely does not mean that every aspect of moral cognition is an adaptation strictly speaking, this opens up space within his second condition (Shafer-Landau, 2012: 20).

This space then creates crucial wiggle-room for the role of critical moral reasoning to take place. Such reasoning would entail questioning whether it seems we have an inclination towards certain behaviors for insensitive reasons, and if such inclinations should be therefore not acted on. Joyce does not raise this important question, but I cannot believe that, upon considering it, he would disallow this possibility. And once this possibility is allowed, it becomes EP's empirical burden to determine which moral beliefs are products of evolution, and the exact extent to which they are simply insensitive products of evolution. This is a daunting scientific task, which EP is far from completing (assuming doing so is even possible). Until they do, we have no good reason to indulge Joyce's skeptical conclusions.

Secondly, AA is focused on the process, not the conclusions. But we have conclusions. And, given our process of moral cognition, we have no possible reason to doubt our moral beliefs. I am willing to grant what Joyce cannot possibly mean: that we are completely controlled by our evolved adaptations. Say it is scientifically proven that humans cannot but act selfishly. Every possible thing my brain leads me to do is a selfish act, and it is not possible my brain would let me do otherwise. Before this was proven, I thought I was especially altruistic in giving to charity. I now know, however, that I must be deriving some sort of selfish benefit from this act, or else I would not be doing it. But what does this new-found fact about my motivations really tell me? That I should stop? I wrack my mind, and can still find no reason not to donate, I still think it is the right thing to do, even though I am now under no delusions that I am being selfless in doing so. This new fact, that I am wholly at the mercy of my evolved adaptation to act selfishly, has not given me any reason to doubt the rightness of my act. Doubting my reasons, when I have no good reason to do so, once again requires the impossible: that I somehow climb out of reason (Dworkin, 1996: 124). AA fails not simply because our moral thought is surely not wholly insensitive to critical reflection, but because even if it was, we would have no reason to doubt our beliefs, once rationally established.

### *Conclusion*

In sum, EP's skeptical arguments, launched at moral realism, all fail. Certain arguments, such as DA, certainly have merit. However, their skeptical conclusions do not follow. Deriving skeptical conclusions from EP's insights will always and forever entail misunderstanding the independence of the ethical realm. That said, EP is certainly not to be thrown into the dustbin of pseudo-science due to the mistakes of a few of its advocates. Not only is EP a worthy project in

the descriptive realm, it can also play a role in informing ethics proper. However, this informing role can only ever be performed in an indirect fashion. Within the conclusion to this thesis, I now turn to establishing the framework for the relationship between EP and ethics.

## CONCLUSION: EP AND ETHICS

The opening sentence of this thesis asked, to what extent, if any, should the study of the biological origins of morality guide the study of ethics? In other words, what is the framework for the relationship between these two approaches towards ethics? Answering this question required unpacking its complexity. We are now in a position to establish such a framework. Before doing this, I will recap how the analysis has unfolded, to show how the following framework is solidly based on the preceding arguments.

### What Have We Learnt?

Our first task was to determine what constituted the study of the biological origins of morality. I called this project EP. Despite the varied projects of EP, I focused on their crucial similarity: EP is a descriptive project, aimed at giving scientific causal explanations for the way things are. As such, EP is concerned with the *is* of morality. I initially placed EP in what I called the “descriptive realm.” I explained that this meant EP worked according to a descriptive logic of inquiry, which operated on the plane of explanation.

Secondly, I presented ethics as a prescriptive project. Ethics is unapologetically normative, and aims to establish the worth of norms to guide behavior. Ethics is, then, concerned with the *ought* of ethics. That is, ethics operates according to a prescriptive logic of inquiry on the plane of justification. In contrast to scientific causal explanations, ethics supplies philosophical reasons for the adoption or rejection of certain behaviors.

These two insights, then, were the first tentative steps towards framing the relationship between these two approaches. The questions became: are these two planes, these two logics, incompatible, exclusive, or complementary? If incompatible, did one project show the other

project to be incurably flawed? If exclusive, did they have nothing to share with each other, no overlap? If complementary, did one guide the other, or does each inform the other equally? Whatever the answers to these questions, they would reveal the pursued framework. We knew that the answers had to be pursued along the lines of this initial distinction between EP and ethics. This distinction between the projects reflects the deeper distinction between *is* and *ought*. This whole thesis revolves around the question of the is/ought distinction.

As the is/ought distinction is an intricate problem, I began by presenting EP's project in the descriptive realm. Doing so had the benefit of discussing the elements of materialism and reductionism in their more simplified format in the descriptive realm. Analysis of EP's descriptive project began to introduce problems that would flow into EP's misconceived normative project. I concluded that EP's descriptive project was commendable, and had provided valuable insights into human moral behavior.\* Upon such insights, some have attempted to draw normative conclusions. Evolutionary ethics founds itself upon EP's descriptive statements.

Because EP can give a causal *is* story about where our moral *oughts* come from, EP believes it can pierce the normative realm. EP believes it has two prongs with which to pierce ethics proper. That is, EP's insights can substantiate ethics, or they can lead to ethical skepticism. I call these two groups of evolutionary ethicists the substantiators and the skeptics, respectively. If either the substantiator's or skeptic's arguments are validated, then evolutionary ethics is viable. That is to say, the is/ought distinction is not insurmountable. Before examining the evolutionary ethicist's claims, I articulated the is/ought distinction.

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\* With the important caveat that EP must work to complement itself with cultural approaches.

I believe that the most important element of the is/ought distinction is that facts and norms play radically different roles. Facts, understood as descriptive statements about how the world *is*, cannot give one a reason for action, or to reach an evaluative conclusion (not to be confused with a calculative conclusion). That is, there is no such thing as a prescriptive fact. Only a norm provides one with a reason to do something, and a basis for evaluation. And just as facts cannot be prescriptive, norms cannot be reducible to any fact, or set of facts. Norms do not originate from facts; they are not generated or constituted by facts. Norms only appear *alongside* facts, and vice versa. Facts and norms are distinct properties wrapped in the same package. A norm constitutes the inner meaning of a descriptive fact. But there is no causal, reductionary relationship between the two.

With this in mind, I proceeded to my critique of evolutionary ethics. If my analysis of the is/ought distinction is correct, evolutionary ethics is misconceived. Both the substantiators and the skeptics are willing to throw traditional evolutionary approaches to ethics under the bus. However, both groups are convinced that new technological breakthroughs, and the evolutionary insights that have followed, have changed the rules of the game. Ethics is no longer the preserve of speculating philosophers. Moral philosophy is an underdeveloped science, an empirical exercise—at least in part.

The substantiators all see the is/ought distinction as a fallacy, or somehow avoidable. Substantiators believe in the existence of objective ethical values, but believe they are found, or somehow supported or illuminated, by an understanding of our relevant biology. However, every substantiator fails to present an ethic that is not question-begging. Their attempts to overcome the is/ought distinction, if not based on eristic verbal games, end up as question begging because EP can only provide causal explanations. Without moral justifications to show why altruism is

indeed a good to be pursued, the substantiators fall into Moore's open question problem. The failure of the substantiators supports my analysis of the is/ought distinction, and points towards the need for justification in ethics proper.

The skeptics share many similarities with the substantiators, which makes sense as they both draw from EP. However, skeptics believe EP's insights lead to skeptical conclusions with regard to the existence of objective ethical values. Further, the skeptics accept the is/ought distinction as real, and condemn substantiators of having violated it. The skeptics fail to realize that, in deriving their skeptical conclusions from EP, they themselves violate the is/ought distinction. This is not discernible to them because they do not realize that, because their critique logically leads to nihilism, it is a moral claim. The skeptics begin with an *ought* and end with an *ought*, all whilst denying the existence of *oughts*. Their concluding *ought* is self-refuting, as they try to maintain we nonetheless ought to act in certain ways. These mistakes mean the skeptics contradict their initial *ought*, of striving to found behavior on well-founded and coherent ideas. Thus, despite skepticism's current popularity, it seems to constitute an even more confused approach to ethics than that of the substantiators. The skeptic's prong is doubly contradictory, and two wrongs do not make a right. I concluded both prongs of evolutionary ethics to be impossible. EP's normative project limps on both legs.

Our analysis of the skeptics reaffirmed my analysis of the is/ought distinction and the need for justification in ethics. It also began to reveal the false dichotomy between meta-ethics and substantive ethics. That is, one cannot critique the foundations of ethics without ipso facto making a substantive moral claim. Finally, the skeptics had been unable to disprove the objectivity of value. In all these ways, the failures of evolutionary ethics pointed to the need for a

superior approach to ethics. With these four problems, I proceeded to my introduction and defense of moral realism.

Moral realism is the idea that ethical claims can be objectively discovered. That is, while there is no such thing as a prescriptive fact, in the descriptive sense of the word, there are indeed moral facts. Such moral facts exist independently of human beings' thoughts and attitudes about them, and are discovered through reason. Because of its reason-based, non-empirical, justificatory approach to ethical inquiry, I argued moral realism embodies ethics proper. I differentiated a naturalistic approach from a non-naturalistic approach, and defended the latter. I broke down the supposed difference between first-order and second-order claims, by showing that the is/ought distinction entails the radical independence of value. I then showed that through a system of rational justification, ethical values could be established just as objectively as scientific facts. Moral facts, and the process by which they are discovered and justified, can never fall under the purview of the natural sciences.

The most important lesson drawn from the existence of the is/ought distinction is the corollary of the independence of value. The independence of value means that ethical claims are only affected by other ethical claims, and can only be based upon other ethical claims in a coherent system of justification. I call this *oughts* all the way down. It is due to the independence of value that every evolutionary ethics fails, though each in its own way—the *Anna Karenina* problem. The independence of value also explains why moral realism's approach to ethics addresses the shortcomings of evolutionary ethics: non-naturalistic moral realism respects the implications of the is/ought distinction by staying wholly on the *ought* side. Realism also shows why this is not a problem for objectivity, since no claim is ever taken for granted, but justified upon another, and so on. Realism does not provide all the answers, and my depiction of it has

been brief and incomplete. But moral realism seems to be immune from the external substantiation or skepticism of EP. And now, we are ready to establish the framework for the relationship between EP and ethics.

### **The Framework**

EP is firmly within the descriptive realm. A scientific project. Ethics is normative. In this sense, there is an incompatibility between the two. Each operates within a different realm, according to a different logic. Each is sovereign in its domain. In this sense, neither undercuts the other. However, their relationship cannot be one of mutual indifference, such as that between poetry and marine biology. The extent to which both EP and ethics are concerned with human nature contributes to a degree of mutual interest between them. The extent to which current communication between EP and ethics is quite vitriolic is therefore a problem. This lack of communication points towards the failure to understand the differing logics of each project, and the implications of that distinction. In many cases, this failure to communicate seems to be simply a case of advocates and critics talking past each other, when they could otherwise be talking to each other. Mutual intelligibility is established along with intellectual borders.

My thinking of the relationship between EP and ethics is most influenced by the thoughts of Kitcher (2006) on this topic, though with some important differences. I differ from Kitcher in advocating a non-naturalistic approach to ethical truth, and I depart from him by adopting elements of Strauss' view of the relationship between philosophy and the sciences. That said, Kitcher and I agree on the most important questions regarding EP's role in ethical inquiry. Kitcher outlines four possible roles for EP to play in ethics (none of the roles are mutually exclusive). The first is, EP "has the task of explaining how people have come to acquire ethical

concepts, to make ethical judgments about themselves and others, and to formulate systems of ethical principles” (Kitcher, 2006: 576). In my own terminology, this is EP in the descriptive realm. EP can show the biological underpinnings of our moral cognition, showing the extent to which it is a product of evolution. This role amounts to EP presenting *is* statements about *ought* statements. Controversial, no doubt. But legitimate science nonetheless.

EP’s viability in this role hinges on its capacity to complement itself with cultural approaches. Any adequate understanding of the origin and subsequent maintenance of moral standards and practices requires an inter-disciplinary approach. Nothing necessarily hinders such fruitful endeavors, save for EP’s hegemonic ambitions and social scientists’ sometimes-unwarranted fears. By establishing the lines in the sand, I hope a framework helps in this realm.

Kitcher’s second possible role is, EP “can teach us facts about human beings, that, in conjunction with moral principles we already accept, can be used to derive normative principles that we had not yet appreciated” (2006: 576). With regard to this possible role, much hinges on how Kitcher means the word *derive*. Kitcher, for the most part, makes clear that he does not see EP as a source of norms, but only facts. However, there is some ambiguity in his thought on this point. Kitcher (2003) seems to be somewhat ambivalent towards the potentially skeptical conclusions of DA.

According to Kitcher, causally speaking, “we can view morality as a human phenomenon that enters our history as a device for regulating the conflict between our sympathetic and selfish dispositions.” I completely agree with Kitcher here. However, he continues, “[w]hat status this assigns to our moral claims depends, I suggest, on the details of the [causal] story, and the details require much more research in evolutionary biology, anthropology, psychology and history than anyone has yet attempted” (2003: 415). Kitcher here fails to appreciate the independence of

value, and ties the status of our moral claims to the outcomes of EP's empirical project. This reflects Kitcher's ambivalence towards non-naturalistic ethical objectivity, and his cautious approval of EP's descriptive project. Ruse chides Kitcher for refusing to take a stand on the issue: "Run with the hare of naturalism, hunt with the hounds of antinaturalism—and blame science for your ambivalence" (Ruse, 2006: 16). If my analysis of the is/ought distinction is correct, philosophers need not wait upon the scientific outcomes. This is a conceptual issue, not an empirical one.

I believe it is impossible for values to be derived from EP. Values can only be derived from values. I believe Kitcher's second role is open to such an interpretation, whether he himself is or not. New facts about human nature, while not themselves producing new norms, can help us see relationships between norms we had never appreciated before. In this sense, EP's insights are an impetus to deriving new norms, but not the source. Those "new" norms were already there, and EP's empirical unearthing helped clarify our thinking on them. As such, I agree with Kitcher that EP has an important role to play here in ethical enquiry.

Granted, EP's informing role to ethics is not qualitatively different than that of anthropology, sociology, and sundry other descriptive projects. However, because EP is so interested in moral cognition, it is only natural that it have a quantitatively closer relationship to ethics. EP's insights can help illuminate how our values relate to other values in ways that were previously unclear. But only value moves value.

Kitcher's second role then, outlines the correct relationship between EP and ethics. Each is sovereign in its realm. Ethics does not guide EP, in the sense that ethics has no ability to correct the causal claims of EP—ethics makes no causal claims. However, by the same token, EP cannot undercut the justifications of ethics—EP makes no justifications. EP's relationship to

ethics is no closer than that of other descriptive projects, except to the extent that the facts unearthed by EP are more likely to lead to possible reformulations of ethical values than the facts of other projects. But strictly speaking, ethics is *not* based on the study of the biological origins of morality.

Kitcher sees the remaining two roles for EP as illegitimate, and I agree. These are that EP “is the key to metaethics” and/or that EP can “teach us new fundamental normative principles” (2006: 576). My previous analysis of evolutionary ethics shows why both these roles are not viable: they violate the is/ought distinction. Projects such as that of Larry Arnhart’s (2005), to show that conservative values are supported by a Darwinian understanding of human nature, are misconceived. And the same goes for similar left-wing attempts (see Singer, 2000). Contrary to the belief of such attempts, Darwinism, in itself, has absolutely no moral or political implications. In order to have this belief, one must hold (and justify) the assumption that we ought to live according to patterns of behavior rooted deeply in our biology. This is not a fact, and EP cannot justify this claim. Once we realize that, we realize we are forever and always in the realm of value when we are debating the ostensible moral and political implications of EP.

Misunderstanding the implications of the is/ought distinction leads to troubling confluences when it comes to considering ethical matters. Consider the following statement by Ruse: “Frankly, I think there is only so far that a philosopher like myself can take the discussion [...] A naturalistic approach means just that—one puts oneself in the hands of scientists. These would include primatologists, students of comparative cultures, game theorists, evolutionary psychologists, economists perhaps, and others” (2010: 299). Moral philosophers surrendering intellectual autonomy to economists! I should think that possibility alone should be enough to reject a naturalistic approach to ethics. However, my analysis of the is/ought distinction adds

many further reasons, and shows such consequences to be impossible. Indeed far from Ruse's humble attitude, my analysis of the is/ought distinction seems to give the moral philosopher a degree of self-importance: *all* reasons for action and evaluative conclusions fall under his or her domain—the ethical realm.

The independence of value allows us to realize the sheer vastness of the ethical realm's domain. The traditional understanding of ethics, of *oughts*, implies the evaluation of different acts, behaviors, lifestyles, etc. However, the ethical realm extends far beyond the articulation of “moral” or virtuous behavior. The ethical realm is concerned with reasons for acting and evaluating. The is/ought distinction suggests that whenever one believes one has a reason to do something—anything—one has derived this belief from an underlying ethical belief. And if one wants to justify said belief, this can only be done with further like beliefs. In other words, if the facts tell the story, the facts alone cannot tell one what to do about that story.

If this is indeed the truth, it is an amazing insight. It not only establishes the framework for a relationship between EP and ethics, but between science and philosophy in a general sense. It is only philosophy's normative logic of inquiry that can give meaning and direction to the important empirical work of the sciences, both social and natural. If “we had genuine knowledge of right and wrong, or of the Ought [...] that knowledge, while not derived from empirical science, would legitimately direct all empirical social [and natural] science; it would be the foundation” (Strauss, 1965: 41) All of that empirical work has to be interpreted before it is understood, before it is acted upon. We have nothing with which to interpret facts but values. And every conclusion is itself a value claim. Facts and values will always be packaged together. EP and the sciences will hopefully continue to unearth more facts of human nature, the brain, the genome, evolution, and so on. I believe that an understanding of the is/ought distinction will

clarify how we interpret these important findings with regard to our self-conception as human beings.

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