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NATURALIZED VIRTUE ETHICS

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CONTENTS

1. ETHICAL NATURALISM 1

1.1. What ethical naturalism is 1

1.2. Why ethical naturalism? 9

1.3. What must be done 16

2. NATURAL TELEOLOGY 19

2.1. Living things and artifacts 19

2.2. The *ergon* argument 23

2.2.1. *Ergon* and function 23

2.2.2. Determining function 28

2.2.3. The function of human beings 39

2.3. *Ergon* and form of life 48

2.4. Arguments for teleology 55

3. GOOD HUMAN BEINGS 60

3.1. Good specimens of a kind 60

3.2. The good human being 66

3.3. Virtues 80

3.3.1. Courage, honesty, loyalty, and justice 80

3.3.2. Primary and secondary goodness 94

3.3.3. Laws in nature 102

4. METAETHICS 106

4.1 Facts and values 106

4.2. Logic 111

4.3. Meaning and essence 118

4.3.1. The naturalistic fallacy and the open question 118

4.3.3. The essence of goodness in NVE 125

4.4. Epistemology 131
4.4.1. Justifying values generally 131
4.4.2. Justifying values in NVE 135

5. **NATURE** 143
5.1. Classifying NVE 144
5.1.1. Virtue ethics and virtue theory 144
5.1.2. Eudaimonism 152
5.2. NVE and neo-Darwinism 157
5.2.1. Our place 157
5.2.2. Evolutionary ethics 161
5.2.3. Happiness and optimality 163
5.2.4. Teleology revisited 168
5.3. What remains 172

Bibliography 177

1. ETHICAL NATURALISM

1.1. What ethical naturalism is

Human beings are a species of social animal for whom there is a characteristic form of life. An individual human being may be evaluated as a good or bad specimen according to how well that individual realizes the human form of life. To be a good human being, one must possess those traits of character that reliably enable one to achieve the ends of creatures like us. The foregoing is a brief statement of the ethical theory I will be presenting and defending in the following pages. I call this theory "naturalized virtue ethics," hereafter NVE. Many defenders of such an Aristotelian ethical theory maintain explicitly that they

are to be understood as carrying out the project of ethical naturalism.[1] I believe ethical naturalism to be a worthy project. Furthermore, I believe that NVE represents the best available naturalistic ethical theory. In the reminder of this section I explain what ethical naturalism is. In §1.2 I present reasons for why we should prefer ethical naturalism. In §1.3 I outline the structure of what is to follow.

The term 'naturalism' is contentious and subject to equivocation, misunderstanding, and abuse. 'Ethical naturalism' suffers almost as badly. Any definition we provide will be in some sense stipulative, but if we are careful it should capture some of the historical meaning of 'ethical naturalism', in addition to separating off an important class of ethical theories. I propose that by 'ethical naturalism' we understand the following.

> *Ethical naturalism*: Cognitivist ethical theories in which important ethical norms and evaluations are grounded in natural facts.

Two of the major ideas in this definition are that of grounding ethics in nature and ethical cognitivism. We shall look at each of these in turn.

1. *Naturalism.* A popular and influential understanding of ethical naturalism is that ethical naturalism stresses the rejection of supernaturalism.[2]

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[1] E.g., Hursthouse 1999, MacIntyre 1999, Foot 2001. More specifically, such versions of Aristotle fall into the general category of "human nature ethical theories" (cf. McShea 1979).

[2] Bernard Williams writes: "A naturalistic view of ethics was previously contrasted with a supernaturalistic view, and it meant a view according to which ethics was to be

That is not the main issue involved in discussions of ethical naturalism today, though we should admit the historical importance of this supposed dichotomy. For example, 'naturalism' has been held by many to be synonymous with 'atheism'. It need not be, of course. But what it actually means to reject supernaturalism is not so clear. If by 'nature' we mean 'everything that is', then of course there is nothing outside nature. But there is no need to make an ontological commitment of this sort. We can bracket the supernatural, as it were, and see how far we get in explaining ethics in terms of nature. What needs to be said more clearly, then, is what is to count as such an explanation.

Nature is, more or less, what our latest and best science tells us it is. This is a commitment that we should make explicit. Our latest and best science comprises physics as well as the biological, psychological, and social sciences. Certainly, research is of varying quality. But our explanation of ethics should make use of those entities countenanced by our latest and best science. What those entities are would require a treatise on naturalistic ontology, which I am not prepared to do. But I think we all have a rough and ready idea of what counts as nature in these terms. And that is the idea of nature I have in mind.

What does it mean to explain ethics in such terms? To explicate that notion, we need to be clear what the explanandum is. If the explanandum is how any particular individual comes to have the ethical beliefs and make the ethical judgments he or she in fact does, then we probably ought to look to psychology

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understood in worldly terms, without reference to God or any transcendental authority" (Williams 1985: 121).

and the idiosyncratic history of that person. If the explanandum is how we as a group come to have the norms that we do, then we might will look to the social sciences. For example, we might utilize the tools of game theory to develop our explanation. That is, we might be able to explain how it is that given our specific sorts of coordination problems and capabilities we end up with the norms that we do. But these are scientific answers to scientific questions. These questions may be answerable by the scientific method, and we may call what we have done "explaining ethics," but it does not seem that there is anything specifically philosophical about our accomplishment.

A philosophical explanation of ethics will explain the moral facts. A naturalistic explanation will explain the moral facts in terms of nature. To make things clear, let us consider what is to be explained. John says, "Mary is a good human being." What makes that claim true, if it is true, is that Mary is a good human being. The question then is: What is it about Mary that makes her a good human being? The answer to be developed here is that she is a good human being because of her traits of character, manifested in her habitual actions. And those traits of character are the ones that make a human being good because they reliably enable the realization of the characteristic ends of human beings. Put more schematically:

The explanandum:

Mary is a good human being.

The explanans:

1. *Mary is courageous, kind, charitable, loyal, honest, intelligent, just, and wise.* [observation]
2. *Those particular traits are the ones that reliably enable the realization of the natural human ends.* [observation]
3. *Possession of those traits that reliably enable realization of the characteristic human ends makes a human being good.* [the naturalistic ethical theory, NVE]

In subsequent chapters I will argue in support of this schema.

A fundamental tenet of naturalism is that human beings are continuous with nature.[3] If this is so, then an account of ethics in terms of nature ought to be possible. One way this idea may be put is that we can "base" or "ground" ethics, somehow, on nature.[4] To ground ethics on nature, then, is to give an account of ethics in natural terms. That is, in grounding ethics we are justifying an ethical theory. In a naturalistic ethical theory we do so in terms of natural categories. Ethical naturalism comprises those theories of ethics that maintain that ethics is grounded, somehow, in natural facts. Providing the 'somehow' in that definition is

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[3] "[Ethical naturalism] stems from the general attitude that man is part of nature. Aristotle's outlook is naturalistic in this sense, so is Mill's utilitarianism, and so are most modern ethical works ..." (Williams 1985: 121). Rosalind Hursthouse echoes this central tenet of naturalism: "[The] standard first premise [of ethical naturalism] is that what human beings *are* is a species of rational, social animals and thereby a species of living things—which, unlike 'persons' or 'rational beings,' have a particular biological make-up and a natural life cycle" (Hursthouse 1999: 206). Cf. Romanell 1958.

to provide a theory. This theory, along with the relevant facts, should entail conclusions that at the very least *cohere* with our reasoned moral judgments. Ideally, those conclusions will *be* our reasoned moral judgments, for the simple reason that the theory in question is our ethical theory.

The above definition of ethical naturalism may lead some to fear that the view amounts to a form of reductionism, with the latter term understood to imply something undesirable. NVE is not a reductionistic theory. Bernard Williams rightly contends: "Questions about naturalism ... are questions not about reduction but about explanation.... The questions concern what we are prepared to regard, at each level, as an explanation."[5] Explanations must fit in with whatever it is that we regard as nature. Williams illustrates his point with the view known as vitalism, which held that living things differ in a deep way from the rest of nature because they possess nonphysical inner forces that give them the property of life.[6] It was thought by believers in vitalism that, therefore, living things could not be explained in terms of the rest of nature. Vitalism has, of course, been rejected by modern biology. Previously, however, biologists who contended that living things could be explained in terms of the rest of nature were generally labeled mechanistic reductionists, the phrase uttered with a pejorative connotation. A similar charge is also leveled at ethical naturalism, that it seeks to "reduce" ethics

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[4] "[E]thical naturalism is usually thought of as not only basing ethics is some way on considerations of human nature, but also as taking human beings to be part of the natural, biological order of living things" (Hursthouse 1999: 206).
[5] Williams 2002: 23.
[6] H. S. Jennings notes two understandings of vitalism. It is a view either (1) "that there is a deep-lying distinction ... between what occurs in the living, and what

to something else, perhaps biology, perhaps to something even more "fundamental" like physics. That is a mistake. As Williams puts the point: "The question for naturalism is always: can we explain, by some appropriate and relevant criteria of explanation, the phenomenon in question in terms of the *rest* of nature?"[7] However, the "rest of nature" when it comes to human beings includes more than just nonhuman stuff. The rest of nature includes the rest of human nature besides ethics, which includes psychology as well as culture, or, in Williams's terms, "non-genetic learning."

Someone might at this point suggest an amendment, that a definition of ethical naturalism should stress that the grounding is to be done purely by nonethical or nonnormative facts. However, this would unduly limit the theory at the outset. It could turn out that nature is, as it were, "normative all the way down," or even "ethical all the way down."[8] As Aristotle noticed over two millennia ago, nature is teleological. I realize this is a controversial claim, and I will be explicating and defending natural teleology throughout the next chapter. But suppose for now that nature is, in some sense, teleological. Teleology allows

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occurs in the non-living" or (2) "that mechanistic formulation is not adequate for giving an account of nature" (Jennings 1913: 386). Cf. Singer 1946.

[7] Williams 2002: 23, his italics.

[8] In a general discussion of ethical naturalism among the ancient Greeks, Julia Annas writes: "If we reject the demand to be reductive, and to appeal to wholly 'non-evaluative' facts, we can still be left with something that can fairly be called ethical naturalism, namely a position which insists on grounding ethical claims in facts about nature that support those claims. This is general enough to form a spectrum of positions, of which reductive versions would merely form one extreme, united by opposition to the thesis that ethical claims are ultimately self-justifying. This weaker position of course leaves it open for the supporting facts about nature to be themselves evaluative or even ethical" (Annas 1993: 136). NVE, it will turn out, is

us to infer normative conclusions. For example, if we know what an organ or artifact is supposed to do, we can deduce whether it is working well or badly. To speak rather loosely, if nature is teleological, then nature itself implies norms. These norms at least allow us to make evaluations. They also, I argue, allow us to make ethical evaluations.

2. *Cognitivism.* Stressing that the ethical naturalism is cognitivist not only separates off such theories from those of Kant, Kantians, and noncognitivists, but is also in keeping with the historical use of the term, at least since Moore.[9] Defining ethical naturalism as a kind of cognitivism is meant to make explicit that the position entails that there are ethical facts. The cognitivist holds that ethical discourse is not systematically misleading, that some of its fact-stating features are in order. More precisely, a cognitivist holds at least the following:

1. There are some ethical truths.
2. Some of these ethical truths are cognitively accessible to normal human beings.

Cognitivist ethical naturalism preserves certain commonsense features of our ethical language. When we say, for example, "Mary is a good person," we tend to think that that evaluation is based upon certain objective features of Mary, her traits, her behavior, her actions. It is desirable if possible to preserve those aspects

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one of those "weaker" positions Annas contends was held by some of the ancient naturalists.

[9] Cf. Sturgeon 1998: 713.

of ethical discourse. A certain sort of ethical naturalism holds out the promise of doing just that.

Noncognitivists argue that, on the contrary, the "surface grammar" of evaluative language is systematically misleading. Pronouncements like "This is bad" or "That is good," though they seem to attribute properties to things and therefore admit of being true or false, in fact do not attribute properties and thus cannot be true or false. Noncognitivism fails at least this test of descriptive adequacy. Pretheoretically we tend to think that there are ethical properties of acts, outcomes, and persons. If it should turn out that our ethical discourse attributes properties where it should not, then certainly we should abandon the cognitivist project. But there is not, as far as I can tell, an *a priori* reason to suppose that noncognitivism is true. Moreover, consistency with our best pretheoretic ideas about ethics is one of the ways that we test our ethical theories. They are, as it were, part of the data of ethical philosophy. It we want to dismiss part of the phenomena to be explained, then we had better have a good reason to do so and, moreover, explain the mass hallucination. Ethical naturalism, on the other hand, must specify only that upon which the discourse is grounded, the truth conditions of a certain kind of evaluative language.

1.2. Why ethical naturalism?

Surveying contemporary philosophical ethics we see that, despite its diversity, ethical theories may be divided into a few exhaustive categories. First, there are naturalists and nonnaturalists. Nonnaturalists include supernaturalists, for

example, divine command theorists, as well as intuitionists like G. E. Moore. Second, there are cognitivists and noncognitivists. There are at least five reasons to prefer ethical naturalism to the alternatives.[10]

1. *Ontological economy*. Many might be pleased by certain kinds of uses of Occam's razor. Ethical naturalism would allow us to give an account of ethics in terms of the rest of nature and *a fortiori* in terms of nature. We will thus have to evoke nothing "nonnatural" in our account. However, it should be stressed that an ontologically economical theory is not for that reason alone to be preferred to one less economical. We should posit only and no more than those entities needed for the explanation. Yet there may be more things in heaven and earth than are dreamt of in some versions of naturalism. The most nearly correct naturalistic ethical theory may be far more complex ontologically than any given nonnaturalistic rival. Nevertheless, there is the sense that explaining ethics only in terms of one kind of "stuff"—namely, natural stuff—is a good thing, if it can be done.

2. *Disenchantment of ethics*. A good theory should help to dispel some mystery about the phenomena to be explained. That is itself a reason to prefer good theories. Many perceive the categories of the nonnatural as inherently mysterious. In some contexts that may be to their credit, of course. But if ethics is a mystery, as it often seems to be, then to explain it with more mystery is really

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[10] Of reasons to prefer ethical naturalism, Robert Audi writes: "The appeal of ethical naturalism, in any of its plausible forms, is strong: it promises ontological economy by construing normative phenomena as in some way natural; it provides for objectivity in ethics, at least assuming that there are objective methods for the study of natural phenomena; it sustains the hope that the rationality of scientific procedures can help in resolving moral issues; and it dispels the sense of mystery which, for

only to becloud the issue. If we can ground an ethics on nature, however, then insofar as we understand nature we can understand ethics.[11] Ethical naturalism can make ethics more easily understood. As the natural sciences have shown us, nature is in many respects intelligible to us. Ethics, if natural, should be no less intelligible. Given what is at stake, it is highly desirable that we understand ethics.

3. *Ethical objectivity*. The quest for ethical naturalism has its roots in what we might term a metaethical desire for an objective ethical theory. An ethics somehow grounded in nature exists independently of historical, cultural, and personal idiosyncrasies. Moreover, on one popular construal, if something exists objectively, then it exists independently of what anyone thinks about it. The 'about' is obviously important. If one's criterion for objectivity in ethics is that ethical truths must obtain even if no one has a mind, then of course ethical objectivity will be impossible. It is not that an objective ethical fact must obtain no matter what anyone thinks. Thought probably is an ineliminable feature of morality. Luckily, we need not be so absurdly strict about what counts as objective truth. Objectivity entails that there are ethical facts. Noncognitivisms seem to have trouble with ethical objectivity.

4. *Scientific rationality*. Ethical naturalism holds out the promise of helping us to resolve ethical issues using scientific means. A significant factor influencing philosophers in the direction of ethical naturalism is the deep impression made by

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many, beclouds other accounts of the ontology and epistemology of ethics" (Audi 1993: 95).

the natural sciences' success in explaining and manipulating nature. Nowadays, a theory's being correctly labeled "scientific" is taken to be a mark of its rationality. Thus many philosophers of ethics would prefer that their ethical theories have a status on a par with the theories of natural science. The hope is that such naturalistic ethical theories would be not only better at explaining ethical phenomena than their nonnaturalistic alternatives, but would also enable us to better guide human behavior, our own as well as that of others.

Most philosophers will desire an ethical theory that is at least consistent with what our best science tells us the world, including human beings, is like. This seems to be a minimal requirement of naturalism. It appeals to one version of the principle of "ought implies can."[12] Of course, it is part of the very nature of science, as currently understood, that scientific inquiry is fallible. That is, what we *think* we know about human nature, using scientific procedures, could be wrong. Moreover, at any given point in time there will be conflicting theories of human nature. It will be unclear, then, with which scientific theory our ethical theory should be consistent. What this should tell us is that, as ethical theorists, we should take into account only those scientific theories of human nature that are relatively well supported by the evidence and accepted by the scientific

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[11] John McDowell sees the disenchantment of nature as a way of understanding an important kind of naturalism, which he understands as "Humean" as opposed to "Aristotelian" (McDowell 1995).

[12] See, e.g., Brown 1950, Montefiore, 1958, Brown 1977, Kekes 1984.

community.[13] Again, of course, which theories these are may change. A commitment to some form of methodological naturalism would entail that we do not commit to our ethical theories dogmatically, that is, without leaving room for change when there is further evidence and theoretical innovation.

However, it is not sufficient for ethical naturalism that the ethical theory be merely consistent with other naturalistic discourse, for many of them are. The theory will be *supported* by certain facts of nature, deduced or induced in the usual scientific way. In NVE certain evaluative and normative claims are grounded by certain facts about human nature, that is, our form of life.

5. *Social utility*. Aristotle says that the end of politics or political science is the human good.[14] The *polis* originates "in the bare needs of life, ... continuing in existence for the sake of a good life."[15] The goal of politics is to promote the common good, or, in the words of the Preamble to the U.S. Constitution, the general welfare. Of course, we may be among certain cynics who think that politics is all about power, in some sense of the term, a struggle among elites to actualize their ends. But at the least we can state a goal for politics: it is to promote the human good.

Ours is a "land of many churches," founded on the promise of pluralism. Increasingly, moreover, the world is becoming more and more a global community. But pluralism and globalism present mixed blessings. The recent past

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[13] Besides the virtue ethics literature, there are several recent works, not all by philosophers, seeking to ground ethics (somehow) in human nature. See e.g., Barkow *et al.* 1992, Clark 2002, Hinde 2002.
[14] *NE* 1094b5ff.

and current affairs make this fact all too plain. From the vantage point of history, one need only to recall the various brutal and costly purges and wars brought on by the Protestant Reformation, a state of affairs historian Jacques Barzun describes as "the West torn apart,"[16] to envision the potential negative consequences of pluralism. On the other hand, from the vantage point of history Luther's posting of the Ninety-five Theses and subsequent revolutionary events seem to be good things. Increasingly, global pluralism appears all but inevitable. We can face the products of that inevitability the way that people often have in the past: with war. Or, we can choose to face pluralism honestly, as something with which we must learn to live. A naturalistic ethical theory, if it be correct, can help to promote the common good by providing us with ethical methods of dealing with conflicts between divergent belief systems.

Consider that many people believe, in the strongest sense of the word 'believe', that religion and morality are inseparable. In some circles 'atheist' is still synonymous with 'degenerate', 'wicked', and 'immoral'. And we should all recall with a shudder the uses to which the charge of "Infidel!" has been put. There are two sorts of ways that we may understand the claim that religion and morality are inseparable. The claim may be understood as contending that morality is impossible unless people believe in *some* religion. The more usual way of understanding the claim, however, is as contending that morality is impossible

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[15] *Politics* 1252b25ff.
[16] Barzun 2000: 42.

unless you and everyone else believes in *my* religion.[17] These are, I respectfully submit, dangerous ideas. Certainly, true ideas may be dangerous, but it is especially pernicious when false ideas are held, ideas that also have negative consequences for human welfare.

Above I advocated the promise of objectivity as a good reason to prefer ethical naturalism. The fact that ethics is grounded in truths about *our* nature, some of which are epistemically accessible through scientific means, entails another important claim: ethics is *universal*. Many have felt the need for an ethical theory that is universal in some way, a theory that transcends culture, religion, and personal idiosyncrasy. Such a need has its roots in a political desire for a liberty that includes freedom *of* religion as well as freedom *from* religion.

Although that desire may be part of the historical or psychological cause of the tendency towards ethical naturalism, there is a deeper, ethical reason to prefer a naturalistic ethics. If culture is not merely a repository of truth but its *source*, then we need look no further than our culture to find out what the truth is. By the same token, if any particular religion is a *source* of truth, then there we may find our truths. In an age where we are thoroughly saturated with the knowledge that there are other cultures and other religions besides our own, traditions of "truth" that often conflict, we may well ask where lies the possibility of a universal ethic,

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[17] An adequate naturalistic ethical theory plus an historical analysis of the relevant cases can show us which norms are worth following, which are neutral, and which should be jettisoned. It may also be the case that, for morality to do its job, so to speak, it must be held to be objectively grounded—even if it is not (cf. Ruse 1986). A transcendent sort of grounding might seem to provide a deeper grounding than one

one that will unite humankind rather than divide us further. Where are we to find this source of truth if not in our nature—an explication of which includes the facts that we are all human beings who share the same planet, that we must get along and help each other get along, that resources are sometimes scarce, that we are all born and die and suffer, that we have desires and hopes and values? Ethical naturalism holds out this promise.

The development of an adequate naturalistic ethical theory would serve two desirable social goals. First, it would show that it is false that morality and religion are inseparable in either of the above two ways. This could alleviate tensions between groups, allowing them a neutral way of resolving disputes. Second, it would allow for the possibility of a morality independent of any and all religions, regional creeds, and ideologies. From a purely ethical perspective, I find these political reasons most compelling. However, it would not serve the laudable goal of a flourishing pluralistic global community if our naturalistic ethical theory did not have the support of evidence and reason. Thus, it must be a plausible ethical theory.

1.3. What must be done

The inspiration for NVE comes principally from Aristotle. The view has its roots in one of his deepest insights about the nature of evaluation. The idea is simple enough to state. It is, roughly, that the logical structure of our ethical

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immanent in transitory and contingent human affairs. This may help explain why it is difficult in practice for people to dissociate morality and (their) religion.

evaluations of human beings is identical to the logical structure of our nonethical evaluations of nonhuman living organisms. In what follows I will defend this theory, showing that it is metaphysically and metaethically sound. I believe it is the best version of ethical naturalism currently being discussed by philosophers. I will not, of course, judge it relative to all other possible ethical naturalisms. The primary opponents of NVE I take to be those of ethical naturalism usually: nonnaturalisms and noncognitivisms of all sorts. I hope to demonstrate NVE's overall plausibility as a kind of ethical naturalism as well as its descriptive and explanatory adequacy. The burden, then, will be on the noncognitivists and nonnaturalists to show where the theory goes wrong in a way that makes their views more likely to be true.

By descriptive adequacy I mean that the account accords with our pretheoretic ideas and intuitions about the ethical phenomena in question.[18] These ideas and intuitions are about what makes a human being a good human being and which human traits are virtues. By explanatory adequacy I mean that the theory explains the ethical phenomena. This is a stronger constraint than mere descriptive adequacy. Explanatory adequacy requires that the theory say why certain ethical phenomena are the case. What needs to be explained is why certain human beings are good and why some traits are virtues and others vices.

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[18] Although his subject matter is welfare, L. W. Sumner provides a succinct account of descriptive adequacy: "The basic test is easy enough to state: the best theory ... is the one which is most faithful to our ordinary concept and our ordinary experience.... The data which a candidate theory must fit ... consist of the prodigious variety of our preanalytic convictions" (Sumner 1993: 10-11).

In developing NVE I must lay some metaphysical groundwork. In Chapter 2, I discuss what to many is still a contentious issue: natural teleology. NVE is teleological. Teleology, both in ethics and in science, has often been looked upon with suspicion. I argue that the teleology operative in NVE is natural, or naturalizable. NVE is on a metaphysically sound foundation.

In Chapter 3, I further explicate NVE and show how several of the standard virtues are justified by the lights of NVE. I also show the further applications of the theory to issues of distributive justice and law. These examples provide tests of the descriptive and explanatory adequacy of NVE, a test the theory passes.

In Chapter 4, I consider the charge, often raised by noncognitivists and nonnaturalists, that ethical naturalism commits some one or other egregious metaethical mistake. This sort of mistake has been associated variously with the fact/value gap, the is/ought gap, and the naturalistic fallacy. I discuss these issues in their general form and relative to NVE, showing that there are no problems here for the theory.

In Chapter 5, I place NVE is the space of contemporary virtue theories and also contrast it with eudaimonistic or welfare-based ethics and with evolutionary ethics. NVE is a good-based virtue theory, but it is neither a kind of eudaimonism nor an evolutionary ethics. Considerations of evolution lead us to certain criticisms of ethical theories like NVE that arise from those considerations. Contra the critics, I show NVE's compatibility with neo-Darwinism. I then suggest further research.

2. NATURAL TELEOLOGY

2.1. Living things and artifacts

Natural teleology is an issue that, for the most part, has not been adequately addressed by advocates of neo-Aristotelian virtue ethics. The index of Rosalind Hursthouse's *On Virtue Ethics* does not have a listing for 'teleology', though the author is obviously comfortable talking of ends and of members of various species being directed towards those ends. Although Philippa Foot is not shy about using the word, her critical discussion of the topic is brief and mostly relegated to a footnote.[1] Given the importance of a proper understanding of teleology for NVE, I spend some time on the issue.[2] In the remainder of this section I discuss natural teleology in a rather commonplace way. §2.2 moves us into more theoretical

[1] Foot 2001: 30-33, 40-41, and *passim*.

territory with critical discussion of Aristotle's *ergon* argument, the centerpiece of NVE. We explore the nature of functions and in §2.3 see what is correct in Aristotle's biological and ethical thought. In §2.4, I present what I take to be the best arguments in favor of teleology in nature.

Philosophers have worried about teleology at least since Aristotle's time. Many have also been worried about teleological elements in ethical theories. There has been particular worry about teleological concepts in Aristotle's ethics, especially the notion of *ergon*, often translated 'function'. I hope to assuage those worries. True, a teleological ethical theory is only as plausible as the account of teleology upon which it depends. I argue that a neo-Aristotelian account of teleology is plausible both from the view of commonsense and from a more scientific vantage point. As a way of laying the groundwork for the sort of natural teleology operative in NVE, I begin in much the way that Foot and Hursthouse do, by providing some mundane examples. These examples should demonstrate how easily we make teleologically-based evaluations of certain kinds of things and, moreover, how "natural" such evaluations are to us human beings. This particular phenomenon, the making of certain kinds of evaluations, is part of the form of life of human beings. Of course, that fact alone does not provide an argument for realism about teleology. That we make such judgments is itself something that needs to be explained. The facts explain the judgments. NVE explains the facts.

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[2] William Fitzpatrick has written a lucid and tightly argued book on natural teleology and its relation to metaethical issues (Fitzpatrick 2000).

Although the primary concern here is with human beings, I agree with Foot and Hursthouse that it may be more productive pedagogically if we not begin with human beings when trying to understand theories like NVE. There are a couple of good reasons for pursuing this strategy. One is that it gets us going in a way that is uncontroversial, so that we may lay the groundwork before there arises in us the urge to start arguing. Suggesting that there is a teleological structure to the evaluation of tomato plants and haircuts will perhaps not disturb too many philosophers. A second reason for this strategy has to do with a deeper theoretical concern. Some proponents of nonnaturalism in ethics subscribe to an "autonomy principle," by which I mean roughly the claim that the Ethical occupies a different cognitive realm from the Nonethical. It would take some spelling out to get to the real meaning of that claim. One possible implication of it, however, is that the way we reason about ethics is different from the way we reason about other, nonethical matters. Now, if we can show that a certain way of evaluating living things is consistent across domains—that is, whether the organisms being evaluated are human or nonhuman and whether the evaluations are ethical or nonethical—then we have, in this particular case at least, shown one implication of the autonomy principle to be false. We may understand NVE as bridging this "epistemological gap." As Aristotle recognized, there is a parity of logical structure in certain sorts of nonethical evaluations we make of plants and animals and certain sorts of ethical evaluations we make of human beings. However, if our judgments are correct, or if they have predictive power, then that there is teleology in nature

might be a plausible explanation for that fact. The utility, moreover, of such judgments might also help to explain why we tend to make them.

I have invited over to my house one of my friends who has a "green thumb." I am a novice at getting things to grow well, and my hope is that she can help me with certain problems I am having. Here's the cactus garden, here's the cucumbers, and so on. Then we come upon my tomatoes. "These look a little sad, don't they," I say. My friend agrees. "It looks like they're getting too much water," she suggests. "And they also appear to have a bit of a fungus problem. There are a few things you can do about that." My friend then proceeds to lay out for me in detail what I need to do to get those tomatoes back on the right track. Over the course of the next several days I try out her suggestions and, sure enough, the tomato plants begin to develop as tomato plants should. This story is so mundane as to be familiar to all of us. What might be unfamiliar is the importance of such a story and others like it to our understanding of what we commonly call "morality" or "ethics." Such stories are important because they help us, among other things, to put morality in its place. What I mean is that we thereby situate human morality in the same sort of context in which we situate the growth, development, and behavior of nonhuman organisms. That context is nature. The principal idea is that there are some important facts about human beings, facts that taken together we could call human nature. These facts, like many others, have implications. Some of these implications we will want to call normative or even ethical.

Important to note in the story is my friend's *help* in giving those plants what they ought to have to be healthy specimens of their kind. She had some knowledge that was applied, knowledge of facts about the form of life of tomato plants. We seem to feel warranted in calling tomato plants with certain features *good* tomato plants. We can and do make evaluations of particular plants and from these evaluations we often derive conclusions about what ought to be done. I see the tomato plant is not doing well, so I do what I think needs to be done in order to get it well. With a little luck, it gets well. When treated as it should be treated, it does what tomatoes plants are supposed to do. More generally, there are facts about all species of plants and animals and the rest, what it takes to make them healthy specimens of their kind, what it means in a given context to call one good and another not. Since human beings are a kind of animal, we can tell a similar story about ourselves. It is in relation to the *telos* of the kind of thing in question that we make the evaluation. In fact, the logic of the evaluation essentially involves the object's *telos*. Hence our justification for calling the evaluative structure teleo-logical.

2.2. The *ergon* argument

2.2.1. Ergon and function

The '*ergon*' of something is its function. This is an all too common way to understand Aristotle. It is, however, problematic, and, I argue, not exactly correct. In this and subsequent sections we will examine Aristotle's *ergon* argument. We

will see where he got things right, an insight that provides the naturalistic foundations for NVE. A proper understanding of *ergon* will prove to be our key to making good sense of the theory. But first let us look at what Aristotle says, where he goes wrong and how *not* to understand him.

In Chapter 7 of Book 1 of *Nicomachean Ethics*, Aristotle maintains, following common beliefs, that the good is the end of action. That is, the good is "that for the sake of which" things are done, relative to the respective case. For example, "in medicine this [end or good] is health, in generalship victory, in housebuilding a house," etc.[3] He argues that the "best good" must be complete and self-sufficient. His criterion of completeness requires that an end be pursued for its own sake, rather than only for the sake of something else. Self-sufficiency in an end requires that it "all by itself ... makes a life choiceworthy and lacking nothing...."[4] The only end that meets the criterion of completeness and self-sufficiency is *eudaimonia*. Hence, *eudaimonia* is the ultimate end of human action. And that is what we generally agree the best good is, though we often disagree about what *eudaimonia* is.

This argument for *eudaimonia* as *the* final cause of human action is, as stated, an argument from common beliefs, although Aristotle does bring in the more theoretical notions of completeness and self-sufficiency to back up these common beliefs. But Aristotle gives another argument about what constitutes the best good, an argument based upon a thing's *ergon*. If we know a thing's function,

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[3] *NE* 1097a20-22.

then we can easily figure out what it is for the thing to function well. A thing's functioning well is its best good. Thus, if we know what the function of a human being *qua* human being is, then we can figure out what it is for a human being to function well. And this well functioning of a human being is the best good for that sort of creature.[5]

For this section and those immediately after I will translate and understand '*ergon*' as function. The point of this is threefold. First, I want us to get clear on how *not* to understand Aristotle. Second, I want to point out where Aristotle goes wrong in his account of how we determine a thing's function. Third, I want to make some progress towards understanding the ideas of function and *ergon*, the difference between them, and the role they play in the logic of evaluation underwriting NVE.

Certain sorts of things, it is commonly agreed, have functions. For example, a carpenter has the function of building things such as houses; the eye has the function of seeing; and so on. For such things as have functions, what it means for such a thing to be a good example of its kind is for it to perform its function well.[6] A good carpenter makes houses well, a good eye sees well.[7] If, in

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[4] *NE* 1097b14-16.

[5] In *Politics* Aristotle offers another sort of *ergon* argument for the claim that man is by nature a political animal (1253a1-18). Everson believes that the argument of *Politics* is further evidence that Aristotle identifies the human *ergon* with practical reason (Everson 1998b: 94). It seems in the passage from *Politics*, however, that Aristotle identifies more than one characteristic property of humans. First is speech, whose job "is to set forth the expedient and the inexpedient, and likewise the just and the unjust"; the second unique characteristic of humans is that they alone have "any sense of good and evil, of just and unjust, and the like."

[6] *NE* 1097b25.

addition to its parts and roles, a human being *qua* human being has a function, then, according to Aristotle, the good for a human being will be to perform that function well. Aristotle does not explicitly argue that a human being *qua* human being has a function. It appears he assumes this is so and then proceeds to utilize a particular strategy that is supposed to show us what a thing's function is. The strategy Aristotle offers for ascertaining a thing's function is quite simple. We ask what function it is that a kind of thing performs that is not also a function of other things. If a human being *qua* human being has a function, it will be that function not shared by other things. Aristotle proceeds to make his case by a disjunctive syllogism:

> [L]iving is apparently shared with plants, but what we are looking for is the special function of a human being; hence we should set aside the life of nutrition and growth. The life next in order is some sort of life of sense-perception; but this too is apparently shared, with horse, ox, and every animal. The remaining possibility, then, is some sort of life of action of the [part of the soul] that has reason.[8]

The function of a human being, then, either "expresses" or "requires" reason.[9] Therefore, to be a good human being *qua* human being, one must reason well. Thus, Aristotle says, "the human good turns out to be the soul's activity that expresses virtue [*aretê*]."[10] This final conclusion does not directly follow, of course.

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[7] It is worth considering whether eyes see at all. In fact, an eye does not see anything, though eyes are for seeing *with*. Nonetheless, we do not really see with the eyes the way we, say, drive nails into wood with a hammer. Seeing is actually a complex process that involves much more than just the eye and its structures.
[8] *NE* 1097b 35-1098a4; the bracketed phrase is Irwin's.
[9] *NE* 1098a7.
[10] *NE* 1098a16.

The relations between the concepts of *good human being*, *the human good*, and *good for a human being* is complicated. But we have gotten some idea of how what is good for *X*s is related to our evaluation of X_1 as a good *X*. If X_1 has those traits that allow it to get those things that are good for *X*s, then X_1 is a good *X*. When we speak of the human good we may mean the good of some individual human, in which case the human good is what is good for individuals. However, we may mean by 'the human good' that which is good for the group, the species, "the race," or perhaps the genome. But what is good for some individual and what is good for the group may conflict, so these two uses of 'the human good' cannot have the same denotation. If we understand Aristotle as trying to link up the human good considered as the good of the group and what is good for an individual human being, he needs some powerful premises that he does not provide.

With the *ergon* argument, then, Aristotle has not quite given us what he promised. He promised us another argument for the claim that the "best good" or *summum bonum* of human action is *eudaimonia*. But it seems that what he has actually given us is an argument for what it is to be a good human being—it is using reason well—as well as what is good *for* a human being. Now, if the *ergon* argument is sound, then it should, in conjunction with the previous argument that the ultimate human good is *eudaimonia*, allow us to conclude that using reason

well constitutes *eudaimonia*, since that is what apparently is good for human beings.[11] The question, then, is whether the *ergon* argument is sound.

2.2.2. Determining function

The method Aristotle might have had in mind for determining a thing's function is that which Plato uses at the end of *Republic* book I.[12] There Socrates claims that the function of a thing is "that which one can do only with it or best with it." A few lines later he rephrases this thought, removing it from the restricted realm of things an agent uses. He claims that the *ergon* of a thing is the work "which it only or it better than anything else can perform."[13] He then concludes that the function of the soul, since it is the work that it alone does or can do, is "management, rule, deliberation, and the like."[14] This method of determining a thing's function has obvious affinities with Aristotle's, if we focus on the part of the method that says that a thing's function is that which it alone does.

Perhaps tellingly, Socrates begins his argument by asking whether a horse has a function, to which his interlocutor answers in the affirmative. But when arguing in favor of his theory, that a thing's function is that which it alone does or it does better than anything else, he shifts to speaking of parts of animals (eyes,

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[11] It should be pointed out that there is some disagreement over whether Aristotle held a "dominant" or "inclusive" view of *eudaimonia*. On the former view, the there is some one good, *sophia*, that wholly constitutes *eudaimonia*. On the latter, *sophia* partially, along with the goods of fortune and other nonaccidental goods like friendship, constitutes *eudaimonia*. To start surveying the literature, see Kenny 2000: 17-31

[12] *Republic* 352d-353e; cf. Thayer 1964 for discussion of Plato's account of *ergon*.

[13] *Republic* 352e5-6, 353a9-10.

ears) and artifacts (various sorts of knives). Then, after getting his interlocutors to concede his theoretical points, he shifts to speaking of the human soul, and never returns to the horse. But, since both he and his interlocutors agree that a horse has a function, and therefore, by his theory a corresponding excellence, it will serve us to look more critically at how his method would apply to horses.

Is there something that horses alone do or do better than anything else? To me it seems there is nothing a horse does that other similar animals do not also do. Eat, sleep, run, reproduce—elephants, cows, and camels do these things. Maybe it is the case that horses do one or the other of these things better than elephants, cows, and camels, though I doubt that very much. And even if they did, it is easy to think of animals that can run faster or reproduce more quickly or in greater number. However, it is open to debate whether any of these things counts as doing it better. We might say that no other animal looks more regal while running than the horse, so the function of a horse is to look regal while running. But such a move is to perform something of a *reductio* on Plato's view. He may, of course, be thinking of a horse as an instrument for human use. This seems likely, in which case we might say riding or plow-pulling are a horse's function. But again, there are other animals that do these jobs (oxen, camels), and some that may do them better. But perhaps the horse is best for riding. However, to make that case, one will have to spell out further what counts as a good riding animal. Whatever the

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[14] *Republic* 353d5.

case, that does not seem the *proper* function of a horse.[15] That is, unless horses are here for us to ride, just as cows, pigs, *et al.* are here for us to eat. I doubt seriously whether this latter suggestion is true.

Nevertheless, there may be something that can be said in favor of horses having the function of riding. This is because horses have been bred by human beings for the sake of riding. Thus, it may be said, horses have been artificially selected for those traits that make them good riding animals. Therefore, horses exist in their current form because they are good to ride. On one popular account of function, then, that is their function, for it is what they were selected to do. Loosely speaking, they were designed to be ridden. In such cases, their functionality resembles that of artifacts more than that of species that have not been intelligently designed. Various plants and animals have been bred to have certain traits that we want them to have. Given that they have been selected for or designed for such purposes, there is no reason to believe that they do not have the biological function of, say, being eaten. However, we must keep in mind that such functions are relativized to human needs and desires. Still, I think my point about the inadequacy of the Platonic-Aristotelian criterion for function ascription stands. For, if the function of, say, domesticated pigs is to be eaten, it is not because they are the only thing we can eat or because they taste better than anything else. Moreover, it does not seem that it is the pig itself that has the function of being eaten, but rather the pig's tasty flesh that has this function.

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[15] See Bostock 2000: 16.

Some people think that everything has a function or purpose, not just artifacts and organs, but rocks, wind, sunshine, and stars. Plato seems to think something like this. In the *Republic* he has Socrates say that we should "apply the same principle," that a thing's excellence is relative to its function, "to all things."[16] Likewise in the *Phaedo* and perhaps most famously in the *Timaeus* beliefs in universal teleology are expressed. Aristotle is more cautious, though it is true that in *De Caelo* he says: "Nature does nothing absurdly or to no purpose."[17] However, his discussion of the aptness of teleological explanations in *Physics* shows clearly that he did not think that such explanations are always apt. He specifically mentions the case of rainfall as being one of those sorts of natural phenomena that should be explained nonteleologically. Aristotle does not seem to think that teleology pervades all things, but he does think that teleological explanations can be properly utilized in the study of the development and behavior of living things and their artifacts. Since human beings are living things, and teleological explanations are often apt in the case of the latter, they may be apt in the case of the former.

In *Nicomachean Ethics* Aristotle sets the case out hypothetically: *If* a human being has some function, then its characteristic excellence will depend upon what that function turns out to be. Yet Aristotle does not *argue* that a human being *qua* human being has a function. Rather, he rhetorically badgers the

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[16] *Republic* 353d1.
[17] *De Caelo* 291b14.

audience in an attempt to get us to concede that a human being *qua* human being has a function:

> Then do the carpenter and the leatherworker have their functions and actions, while a human being has none, and is by nature idle, without any function? Or, just as eye, hand, foot, and, in general, every [bodily] part apparently has its functions, may we likewise ascribe to a human being some function besides all of theirs?[18]

We must analyze this passage carefully, for it reveals a few things. Most importantly, it seems Aristotle trades on an ambiguity of '*ergon*' that does not exist for the word 'function' in English.[19] But if we translate '*ergon*' as 'job', we will perhaps find the argument less compelling. For, certainly, the carpenter and leatherworker—*qua* thing of their respective kinds—have jobs to do, just as the eye, hand, etc. have their jobs to do. But it seems that we can legitimately say only of the latter sorts of things that they have functions. In their case it is specifically biological functions. We might ask, "What is the function of a carpenter?" But it seems we are then speaking by analogy with artifacts and organs. But I admit that we may here devolve to mere quibbling, and antagonists might even accuse me of begging the question. Therefore, I leave this objection aside.

Still, the fact remains that Aristotle's argument is a weak one. It amounts to saying something like: "Are we to say that certain kinds of human beings—

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[18] *NE* 1097b29-35; word in brackets is Irwin's. Ostwald in his (1962) translation of *NE* notes that '*argon*', the word translated as "idle, without any function," "is a *double-entendre*, which means literally 'without function' or 'doing no work' but was also used colloquially to denote a 'loafer' " (p. 16n27). I think this further supports my claim that Aristotle's argument is noteworthy more for its appeal to *pathos* than to *logos*.

[19] 'Function' does, of course, have its own ambiguities. See Wright 1973.

craftsmen at that—have a job to do, but that human beings themselves do not?" I could easily answer: yes, we at least can *say* that. It remains to be seen, or shown, that a human being *qua* human being has a function. Aristotle's saying it is so does not make it so, nor will he shame us into agreeing with him. I could just as well ask: Are we to say that the liver has a function and that the stars do not, and are by nature idle, with nothing to do? Hence, stars must have a function. And, although we have already seen that Aristotle's method for determining a thing's function is unsound, we could follow things out here. The stars twinkle at night better than any other stellar objects; in fact, they are the only objects that do so. Thus, the function of the stars is to twinkle at night. I trust the force of this counterargument is apparent.

The question persists, however, whether a human being *qua* human being has a function. This question is, of course, a specimen of the more general question of whether any organism *qua* organism of its kind has a function. Aristotle's arguments neither show that *qua* human being you or I have a function nor what that function is.[20] Do human beings have functions? How could we tell?

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[20] An important conclusion that Aristotle draws is that the *summum bonum* of human beings *qua* human beings is *sophia*, theoretical reasoning or contemplation. Thomas Nagel puts Aristotle's main point regarding the human function rather paradoxically: "Aristotle believes, in short, that human life is not important enough for humans to spend their lives on. A person should seek to transcend not only his individual practical concerns but also those of society or humanity as whole.... [W]ith reason man has become the only creature capable of concentrating on what is higher than himself and thereby sharing in it [reason] to some extent. His time is, so to speak, too valuable to waste on anything so insignificant as human life" (Nagel 1972: 12; page citation is to Rorty 1980). These quotes give expression to the "intellectualist" account of the human *ergon* that Aristotle puts forth in Book 10 of *Nicomachean Ethics*. On that account *sophia* is that to which a human being should aspire. For another advocate of the "intellectualist" view, see Clark 1972. For more arguments

Suppose we discovered a mysterious entity the function of which was unknown to us. How would we go about determining what, if any, its function is?[21]

Readers will probably be familiar with Paley's "watch argument."[22] Imagine an aborigine walking through a forest and encountering a mysterious object. Unbeknownst to him, the object is a pocketwatch. The native turns the object over in his hand, studies its intricate workings, and finally surmises that it must have been designed by some intelligent being, since that is the best explanation of the thing's properties and perhaps even its being. And, since the workings of organisms are far more complex than any watch, we find ourselves driven to conclude by parallel reasoning that organisms also must have an intelligent designer. As opposed to an argument *from* design to the existence of an intelligent designer, we should read Paley's argument as an argument *to* design.[23] Presumably, one must provide the latter before the former, else the former is

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on this side as well as references to arguments on both sides of the issue of whether Aristotle held a "dominant" (intellectualist) or "inclusive" view, see Kenny 2000: 17-31.

[21] Thomas Hurka in his *Perfectionism* (1993) tries to show how we would go about determining what human nature is. He criticizes the Aristotelian method on various grounds, and then provides his own account. He argues that the measure of what counts as human nature is to be discovered by determining what is essential to human beings, and that moreover we are obligated to maximize these essential properties. His method is interesting, but has not escaped criticism. One obvious objection to this view is that there are things essential to human beings that should not be maximized because they are not good (cf. Stocker 1995).

[22] Paley 1805.

[23] Lately, philosophers have been arguing that nature demonstrates an "irreducible complexity," which is evidence of design. If there is design, then there must be a designer. Therefore, there is a designer. Or so the argument goes. The question of course is whether there indeed is evidence of design. See Behe 1996, Dembski 1999, and Pennock 2001.

nothing but schematic. The reason is that we must show that there indeed is design before we can use that as evidence for the existence of a designer.

I will not weigh in on the soundness of this argument.[24] Instead, I want to focus on an issue that Paley does not consider. This is the question of ascertaining the function of a mysterious artifact or organ. Suppose that one finds what is apparently an artifact or that one discovers an organ in a plant or animal the function of which is unknown. Such a thing must happen to archeologists and biologists quite frequently, though probably less frequently as time goes on and more discoveries are made. How would one go about determining the function, if any, of such objects? Would we use a method similar to that advocated by Plato or Aristotle?

An archeologist on a dig finds what looks to be an artifact. She may compare the artifact with other known artifacts, from a similar time period, the functions of which are pretty well established. If we see that the object in question looks very similar in design to these other objects, then it is reasonable to conclude that it was made to do a similar job. Of course, it may be that the artifact in question resembles no previously known artifacts. In that sort of case the problem is tougher. We would then have to see what sort of work the thing can do. We may then ask Socrates' question: "What can this thing alone do or do better than anything else?" However, this question alone often will not settle the matter, for there are many things that can do the same job. Moreover, if the thing is an artifact

from a bygone era, we might conclude that we have already made things that can do the job better, given the growth of scientific knowledge and technology. We might also want to see what the mysterious artifact can do best given the technology of its era. But I am not sure that that is helpful either. Imagine an aborigine stumbling across various items from our contemporary civilization. She finds a telephone and a computer hooked to the Internet logged into an email account. Let us say she is a savant, so she tries to figure these artifacts out. They are both used for communication at long distances, and both can probably do the job equally well. (They both can, of course, especially the computer, be used for various other things too.) Another thing one might do, that could prove very helpful, is to find out what the intentions were of the person who made the artifact. If such information is available, then even if the artifact is woefully inadequate to the task for which it was designed we could still understand what its function is. Such information is often hard to get, however.

The biologist studying the organs and behaviors of organisms often faces similar problems as those facing the archeologist. But when a biologist sees one of these newly discovered organs, she does not first ask what the thing alone can do or what it can do better than anything else. First, she will want to see what work it does. Second, she will probably compare the thing with other organs of similar organisms, the functions of which are well known. If there is no such comparison class, she may then want to look further at the role the organ plays in the

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[24] See Sober 1993: 30-36. Cf. Hume's *Dialogues Concerning Natural Religion*

containing system, that is, the organism's characteristic form of life. Finally, a biologist may look at the organ from an evolutionary standpoint. She would then see what effects the existence of the organ has on the survival and reproduction of the organism, which effects would account for the organ's being there in the first place.

To sum up, there are three general strategies one can use to determine the function of a mysterious artifact or organ, including behaviors. First, we can do a functional analysis. To do this, we must determine what contribution the thing in question makes to the system it is a part of. This will involve determining what the system is and what counts as "contributing" to it.[25] Second, if the thing is question is an artifact, we can try to understand the intentions of the designer. Finally, if the thing is biological, we can do the relevant evolutionary research to determine which of its causal effects are responsible for its continued presence in the organism, or more exactly of its type in the species or subspecies.

Of course, archeologists and biologists are working under the assumption that the items they are studying actually have functions. Is this a reasonable assumption to make? In the case of artifacts, the answer is a qualified yes. *Most* things people make serve some purpose: they are designed and built to do certain jobs. This may seem to leave out things made for purely aesthetic reasons. But decoration of the home and adornment of the person or appeasement of the gods are also purposes. Perhaps, however, a thing could be made for self-expression,

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(1779).

not to do anything or decorate anything, but solely to make the creator feel a certain way. In such a case, it is the actual making or creation of the thing that is the reason for its being. It has no further purpose. This is a possibility, and things made for such reasons may be hardest to understand, though they probably represent a very small class of artifacts.[26] So, despite the presence of this subclass, when it comes to artifacts, the assumption that the thing has a function is generally a reasonable one.

Is this assumption reasonable when it comes to organs and behaviors?[27] Given that plants and animals have limited stores of energy and time, it is reasonable to assume that most of their organs and behaviors serve some purpose. Many will conclude that the organ or behavior must relate, however tangentially, to survival and reproduction, if not of the individual at least of the "germ line" or genotype. We might recall Aristotle's claim: "Nature does nothing absurdly or to no purpose."[28] We may read this as an expression of a belief in a universal teleology, and the context of the utterance could warrant that reading. But we may give it another reading in keeping with Aristotle's writings on teleology elsewhere, and moreover with modern biological theory, particularly that part of

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[25] We must know its good; cf. Bedau 1992a.

[26] We may recall the Christian doctrine that God created human beings out of *agape*, a certain kind of love. This doctrine may be understood, I think, as implying that God did not create human beings *for* anything; hence they do not have a function. But that reading, I assume, conflicts with another Christian doctrine: that we were created to serve God and hence that is our function.

[27] There are debates in the philosophy of biology literature about whether and to what degree organisms are adapted to their environments, and also whether the assumption that every part of an organism is an adaptation (and therefore—this is

biology represented by the field known as ecology. In that field an important area of study is the "life history" of types of organisms, where researchers examine constraints and trade-offs between various processes in light of their contributions to survival and reproduction. Given the costs, it is unlikely that a complex organ or process will be maintained in a population unless it enhances fitness or at least is not detrimental to it. Incurring great cost with no benefit would probably eventually result is an organism's demise or even its species' extinction. It would at least result, *ceteris paribus*, in that particular trait's being selected out of the population. Thus, given certain plausible assumptions about organisms, it is reasonable to assume that many of their parts and processes, especially those that are relatively costly, will have a function.

We have seen that the methods advocated by Plato and Aristotle for determining a thing's function can provide some guidance, but contemporary students of such things have other methods as well. The question remains, however, whether a human being *qua* human being has a function.

2.2.3. The function of human beings

As Aristotle shows, in seeking a certain kind of explanation we can ask a series of similar questions, building upon our answer a teleological structure. What is the purpose of a knife? To cut. What is the purpose of cutting? To prepare

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controversial—has a function). This latter view is called "adaptationism." See Gould and Lewontin 1979, Dawkins 1983, Dennett 1995: 238-251, and Sober 1996.

[28] *De Caelo* 291b14.

vegetables for cooking, for example. Why prepare vegetables for cooking? So we may eat. What is the purpose of eating? So that we may go on living. The series may stop there, though one could ask what the purpose in living is. In that case we may confront what looks to be more of an existential question. Of course, we may answer glibly, "That is what we do: living things continue living." But the question may be understood not as the general question of why should all of us—the entire species—go on living, but as the specific question concerning some individual person. Why should *I* go on living? Why should *she*? Why should *you*? The question could also be put: Why am I here? For what *reason*?

Yet, if I have an answer to the question of what the human function is, then I am presumably well on my way to determining my own function, and yours and hers. If I know what the human function is, then I know what, *qua* human being, I am supposed to do. However, the very notion of a human function strikes many as absurd. But, if this is true, is this a counsel of despair, not only for proponents of NVE, but for everyone else? Is Aristotle right, that if human beings *qua* human beings have no function we are idle, with nothing to do? If there is no human function, no purpose to the individual life, then it seems not to matter whether I devote my life to helping others, to contemplation or to pleasure, or whether I commit suicide right this moment. For, if human beings *qua* human beings have no purpose, then certainly *I* myself have no purpose either, and hence I am useless, life has no meaning, all is without value.

We certainly need not take the question quite so existentially as that, or even take it seriously. In fact, we may put on our positivist hats and declare the question itself idle or meaningless. It is on a par with asking what is the function of the sky or the purpose of gravity. Those questions do not have answers because they are ill-formed. The same goes for the questions about what my purpose is or what the function of humanity is.

I suggest we not move too quickly in either direction. We should take seriously the question of whether a human being *qua* human being has a purpose or function. The question has been important to the philosophical tradition. As we have already seen, Plato and Aristotle considered a version of it; and through Aristotle the method of trying to discern a thing's essence by considering its function was a prominent feature of Scholastic philosophy. And it is still, despite millennia of questioning, an interesting question. So, let us ask, and take seriously, the question: Does a human being *qua* human being have a function?

One answer is no, we have no function, we are idle. That is, *qua* human being, there is nothing for any one of us to do. This is not to say that, given our roles, relationships, and projects, we have nothing we are supposed to do. Many will claim, moreover, that it is impossible to separate a human being from these things, even in the abstract. The position is that we cannot even conceive of a human being apart from her social roles, apart from her relationships with others, apart from her chosen projects. Such a being would be more like a beast or a god

than a human being.[29] But it does not follow from this that life has no meaning or that immediate suicide is just as valid an option as a life devoted to helping others. For, the rejoinder continues, any one of us is partially constituted by our social roles and our chosen projects. That is part of who we are. Relative to those roles and projects I have obligations, that is, things I am supposed to do. Not only can I not be conceived apart from these roles and projects, but it seems I would not exist apart from them. So, the fact that *qua* human being I have no purpose is not a counsel of despair. It is just a fact about what sort of creatures we are.

Another sort of answer, one that embeds human life in a deeper teleological structure, sees human life as itself serving some purpose. We do not strive to continue living just to go on living. Our living itself has a purpose. There are various ways we can spell out this idea, ways that will differ from one tradition or worldview to another. All of us know the general sort of story. It is a theological one. A proponent of this view will claim, human beings *qua* human beings do have a function. This function or purpose is to love God, to do His will, to serve Him. Of course, figuring out what these latter two things are may take some work on our part, but that will in itself be part of fulfilling our purpose. Part Three, Section One of the Catechism of the Roman Catholic Church discusses "man's vocation." 'Vocation', derived from the Latin '*vocare*' ('to call'), often means just that: a calling, especially to a religious life or religious order. But the word can also mean one's job or career—or, in an extended sense of the term, one's

[29] See *Politics* 1253a1ff; cf. Nussbaum 1995.

function. Although even within a certain religious tradition it may be difficult to figure out what that entails, nevertheless this does provide an affirmative answer to the question of whether a human being *qua* human being has a function. Moreover, we can discover that function, if we understand the intentions of the designer.

It could also be the case that human beings are heading towards some goal, though not specifically a theological one. Many thinkers have believed in a historical teleology, to use Michael Ruse's term, of an avowedly nontheistic sort.[30] We might think here that the function of any individual person is, say, to foment the revolution or perfect human nature as such. Some have a notion of progress such that we all are playing some role, though there is not much we can do about it. To this way of thinking, similar to the Marxist in many respects, the human species is evolving towards some goal.

Though many current Darwinians believe in some vague notion of progress, many do not. Progress may be what happens, but it is not something aimed at. It just is what happens due to the working of the selective pressures of changing environments. Roughly speaking, species become more fitted to their circumstances. Thus we see how we get design-like features without an intelligent designer. Thus a fourth sort of reply we may be tempted to call "Darwinian." To the question of whether a human being *qua* human being has a function, the answer is yes. That function is to make another human being, just as the function

[30] Ruse 2002.

of a horse is to make another horse, a lion another lion, etc.[31] No doubt to many this will sound like a facile and perhaps even insulting answer. For it would imply, among other things, that human beings who do not reproduce, either because they cannot or just do not want to, are somehow defective. An organ or artifact that cannot perform its designated function is not a good example of its kind, at least insofar as its function is concerned. And, if the *essence* of a thing with a function lies in the performance of that function, then if a thing cannot perform its function we will see it as defective in a profound way.

There is another, more promising reply. Even though I have a deep sympathy with the general neo-Darwinian picture of things, I suggest that we do not understand the human function in the previous way. It is too limited. We must look at a picture that is not just bigger but more complex, taking into account all the things that are involved in a human life, in the form of life of human beings as such. A woman who reproduces and then immediately abandons her offspring for superficial reasons is a bad mother, just as a man who does the same is a bad father. This is the case even if the child should turn out okay and therefore the biological contributors to its existence get their genes into the next generation. Almost anyone can reproduce. On the male's part there is actually very little initial effort involved. But reproducing and being a good father are not the same thing. It is even false that the latter entails the former. We see here how different ends may conflict in their demands. But to warrant our evaluations in such cases we need a

[31] Cf. Dawkins 1976.

more robust theoretical structure than a facile "Darwinism" that sees total genetic proliferation as the human function.[32]

We are not speaking correctly when we say that a human being *qua* human being has a function, if we take 'function' in this case to mean what the word usually means in biology or in engineering. There are two major competing accounts of function.[33] The concern here is with morphological or behavioral traits of organisms. On one account, we conceive of a thing's function as that which it was selected to do.[34] The eye, for example, has allowed its possessors to survive and reproduce, a fact that accounts for the presence and continued existence of the eye. This is the "selected effects" or "etiological" account. According to the other account, a thing's function is the goal-directed role that it plays in some containing system.[35] The eye plays such a role in the human system. It allows one to see, which allows one to fulfill one's goals of survival and reproduction. This view is often called the "systems" or "cybernetic" account of function. *Prima facie*, either of these accounts can also explain function-talk when used of artifacts. However, with artifacts we may also introduce the notion of design, where the intentions of the designer play the crucial part in determining what a thing's function is.[36]

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[32] Some might draw this conclusion from considerations of the theory of kin selection, first presented in Hamilton 1964. See also Dawkins 1976.
[33] More or less.
[34] Wright 1976.
[35] Cummins 1975; cf. Bedau 1992a.
[36] Bedau 1992a calls this the mental approach.

Each of these accounts of function has its merits and demerits.[37] What I want to argue here is that, unless human beings are artifacts, it is difficult to see how they could have a function in the technical senses of that term. On the etiological account, it is difficult to understand what the effect of an individual human being is supposed to be or what exactly it is that was/is selected. Someone defending such an account might suggest that it was *individuality* that was selected for, because of its contribution to fitness. There are two problems with this idea. First, we might ask to whose fitness the trait contributes. The human genome? The mammalian genome? We must answer these questions, and until we do it will be hard to make sense of this suggestion. Second, if *individuality* is an evolved trait, presumably it evolved long before *Homo sapiens* ever entered on the scene. But it does not seem that individuality was ever anything that evolved, and was in fact part of the initial conditions of things. Obviously here we are treading deep metaphysical waters, though it does not then appear that *being human* was a trait selected for in evolutionary history. Thus, on the etiological account, claiming that a human being *qua* human being has a function makes no sense.

On the systems account things fare no better. For it is difficult to understand just what the containing system is to which human beings are supposed to belong and to whose maintenance or equilibrium state they are supposed to be contributing. Now, one might say that the containing system is all of humanity and that for a human being to perform its function is for it to contribute to the

[37] For more on the philosophy of functions see Allen *et al.* 1998 and Ariew *et al.*

continued existence of the human species. A question then is just what the effects are of human beings that are supposed to contribute to this goal. I suppose if I reproduce I have contributed to this goal. And if I develop a new cancer drug that saves lives I have also contributed to it. However, suppose my reproducing and my cancer drug eventually result in an overpopulation problem, a problem that leads first to a wholesale depletion of food supplies and degradation of the environment and finally to famine, disease, and overall "crash" of the human population. In that case, we may say that these very same behaviors are a malfunction on my part. The general problem here is that in the case of human beings there seems to be no principled way to determine what the containing system is, nor what counts as maintaining it, nor what the relevant effects are. It appears then impossible to make good sense of the function of human beings on the systems account.

However, we might think of the terrestrial ecosystem itself as being the containing system. We might think that planet earth is at least analogous to a living organism. Like a living organism, it "seeks" equilibrium or homeostasis. As a part of this system, human beings have a function, which is contributing in their way to the maintenance of the system's integrity, that is, its normal state. All of this is, of course, quite controversial. For one thing, there is no real reason to believe that the terrestrial ecosystem is enough like an organism in the right way, that is, in being something that tends toward an equilibrium state.

2002.

Finally, even if human beings and other organisms are artifacts, and not just essentially similar to artifacts, we encounter problems. Outside a specific theological or religious context the intentions of the designer must remain inscrutable to us. This is not to say that organisms are not artifacts, or that one or another of the religious traditions does not have the right answer about what the human function is. But recall that the project at hand here is the development of a naturalized virtue ethics. On the preferred understanding, a naturalistic ethical theory must be able to stand independently of any particular religious tradition. It may, of course, be consistent with many of them or perhaps with all of them, though the latter is doubtful. But we must arrive at the facts and theories that inform the theory through means other than through personal revelation or sacred scripture. So, even if it is the case, for example, that human beings *qua* human beings have the function of loving and serving God, and even if we believe it implicitly, our theory cannot have that fact underwriting it. If we were to use that approach, we could not in good conscience call the resultant theory "naturalistic" or "naturalized"—even if it were true.

2.3. *Ergon* and form of life

Of that frequently misunderstood term of art, Terrence Irwin writes: "The best single translation for '*ergon*' would be 'work'."[38] Besides function, *ergon* can also refer to the process of production, the outcome of a certain process,

[38] Glossary to Aristotle 1985: 404; cf. Sparshott 1994: 41.

achievement of any sort, activity, and, contrasted with *logos* as "mere speech," what we do as opposed to what we only say. In modern parlance, we might in many of the instances use the word 'job' in place of '*ergon*'. Of course, we may use an artifact, for example, for work or jobs that are not its function, as we may use a butter knife to open a door or a brick to prop the door open. The same goes as well for parts of animals. For example, the function of the nose is to smell, though it also does well in propping up someone's glasses. So, then, how are we to distinguish a thing's function, if it has a function, from mere stuff that it does? Aristotle's method is to see what it is that that sort of thing does that nothing else does. At least this is his method in regards to human beings. But that cannot be his method in general, at least if we wish him to be consistent. For just as humans share nutrition and growth with plants, the reverse is also true. Since that is the case, we can make a similar argument to the effect that nutrition and growth is not the function of plants. Moreover, presumably the gods or God also use reason, probably better than humans. At the least, God would reason better than humans, and Aristotle himself says as much.[39] So it is neither the case that reason is unique to humans nor that we are the best at it.

At this point I must back off a bit from my prolonged criticism of Aristotle. For now it is time to see how he got things importantly right, which will form the core of NVE. I demonstrated in the previous section that, if we take 'function' in one of the two restricted senses (leaving aside the question of whether humans are

[39] See *NE* 1177b25-1178a5, 1178b5-30; cf. Nagel 1972.

artifacts), it is difficult to see how a human being *qua* human being could have a function. But, if we do not translate '*ergon*' as 'function', or if we do so but do not understand 'function' in one of the two prominent technical senses, then we see that there is something important and also *true* in what Aristotle says. The human *ergon* is what we do, our form of life, the characteristic processes and behaviors we exemplify and in which we engage. This interpretation seems closer to Aristotle's intentions.[40]

In her defense of Aristotle's view, Jennifer Whiting puts the point as follows:

> Very roughly, [Aristotle's] view is that for each species there is an ultimate end such that realizing that end (which Aristotle identifies with living a certain kind of life) is categorically or unconditionally good for any normal member of that species—that is, good for it whatever its actual interests and desires.[41]

Not only does this ultimate end determine what is good for a member of a particular species, we can determine by reference to it whether members of that species are good. It sets the standard they must meet. It is relative to the *ergon* or form of life of a species that members of that species are evaluated as good or bad. That is the core of NVE. It seems, perhaps, a simple and obvious notion, but its descriptive adequacy and explanatory power are formidable. Human beings, like other organisms, have a certain characteristic form of life. This form of life involves nutrition and growth, sensation and perception, practical and theoretical

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[40] This reading of Aristotle is also advocated by Kenny 1965, Attfield 1981, Nussbaum 1988, and Sparshott 1994.
[41] Whiting 1988: 36; cf. Bostock 2000: 17.

reason, and many other things as well. What it means for an instance of this form of life to go well is for these processes to be carried out excellently. A defect in any one of these processes may cause an instance of this form of life to go badly.

We can express the partially filled-in structure of the *ergon* argument schematically as follows:[42]

1. For any *F*, if the *ergon* of *F*s is φ, then a good *F* is one that φs well.
2. The *ergon* of human beings is φ.
3. Therefore, a good human being is one who φs well.[43]

Note that I have left it open what the human *ergon* is. We know what Aristotle's answer is: the human *ergon* is "an activity of soul that expresses reason." There are many ways to understand this, though we need not go into them. For now, I want to leave it an open question what the human *ergon* is, though I will deal with that question in Chapter 3.

A question is whether we find premise (1) plausible. I, for one, do find it plausible, and moreover trust that I am not in a minority. Perhaps it is not an *analytical* truth; maybe it is an empirical generalization, in actuality a fact about what we—if we were well-informed—would say about a particular individual of a species if it were able to actualize its form of life well. That is, if the theory as spelled out so far is correct, then we would predict that, if we observed an

[42] My analysis is based on Whiting 1988: 34.
[43] A further conclusion that Aristotle draws is: (4) Therefore, α, β, ..., ω are good for a human being.

organism that was able to actualize its form of life well, we would tend to say that that organism is a good specimen of its kind. For it does what *F*s do (though in a very special sense of 'to do'), and it does it well.[44]

Human beings, as well as other living things, have an *ergon* or form of life relative to which we can evaluate individual members of a particular species. That is Aristotle's insight, the moral we can take away from the *ergon* argument. We need not think that human beings *qua* human beings have functions in any technical sense, nor that we determine functions by determining what is peculiar to a kind. But we can see what Aristotle got right: a good *F* is one that actualizes the *ergon* of *F*s well. That principle plays a foundational or justificatory role in the mode of evaluation central to NVE. For the present I leave as an open question the nature of this principle, that is, whether it is normative, logical, psychological, or whatever the case may be. We will, however, examine it in Chapter 4.

In NVE, the notion of a *ergon* plays an important role. We have seen how a thing's *ergon* has been understood as its function, and how this is sometimes correct though sometimes not. For, though human beings *qua* human beings have an *ergon*, it is not the case that individual human beings have functions in any technical sense. Advocates of theories like NVE have used the expressions 'form of life' or 'lifeform' to express the same idea as *ergon*. The phrase comes from the

[44] However, even though we can understand Aristotle's thought this way, and even though there is great plausibility to the thought, an exegetical point is in order. The "good person" referred to in the *ergon* argument is not *agathos*, the common word for good in Greek, but a *spoudaios*—a serious or excellent person. Such a complication may affect our exegesis of Aristotle, though for present purposes is not relevant. See Sparshott 1994: 51ff.

English translation of Wittgenstein's '*lebensform*', an expression that occurs five times in *Philosophical Investigations.*[45] Exegesis of the idea is a point of controversy for Wittgensteinians, though following Philippa Foot I will use the term in what I take to be a relatively uncontroversial way. In saying that a certain class of organisms has a form of life we are saying that there are species-specific activities in which those kinds of organisms engage. They, in Hursthouse's phrase, have a "characteristic way of going on."[46] Thus, nest-building is part of the form of life for certain kinds of birds. Importantly, a certain activity of organisms makes sense only relative to the form of life of the species or, as the case may be, subspecies. Language, Wittgenstein thought, is part of the human form of life. Properly understood, language is probably unique to humans, at least as far as life on planet Earth is concerned. This is not to say that other types of organisms do not communicate with one another. But they do not do so with language.[47]

A characteristic behavior of human beings is *evaluation.* Such behavior may be of an ethical or a nonethical sort. That is, the subject matter of such evaluations may be such things as fall under the rubric of the ethical and some may not. A key theme of everything that is to follow is the idea that the logical

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[45] Wittgenstein mentions *lebensform* or form of life five times in the *Investigations*: "... to imagine a language is to imagine a form of life" (§19); "... the term 'language-game' is meant to bring into prominence the fact that the *speaking* of a language is part of an activity, or of a form of life" (§23); "It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life" (§241); "the phenomena of hope are modes of this complicated form of life" (p. 174); "What has to be accepted, the given, is—so one could say—*forms of life*" (226).

[46] Hursthouse 1999; cf. Foot 2001.

structure of a certain class of our evaluations is common to certain kinds of ethical and nonethical evaluations, evaluations that may be of humans or nonhumans. We do this without thinking much about it and usually without explicitly considering the theoretical underpinnings of our utterances. We tend to say or think or feel that certain things are good, some bad, some in-between, and some neither one nor the other. To make an utterance, either verbal or nonverbal, that is an assessment of the *worth* of some entity is to evaluate that entity. We may also call such an act of evaluation a *value judgment.* These evaluations may concern the worth of a host of different sorts of entities, so that the examples we could provide of things people evaluate are practically endless. We might say that John has a bad haircut or that *Citizen Kane* is a good movie or that our day so far has been not too bad or that giving to charity is generally a good policy. Only the last of these is explicitly an ethical evaluation. Ethical evaluations are a special subclass of evaluations, a subclass usually of most interest to moralists and philosophers of morality.

When we do so judge the worth of some entity, there is generally underlying our judgment some sort of criterion, which, along with the relevant facts, is supposed to warrant or justify or support our use of the evaluative expression. Such a criterion, allied with the facts, should tell us *why* a particular object is good and another bad and another neither or in-between, given the context and intent of the utterance. The criterion at play is not always or even

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[47] It would take us far afield to try to develop an account of language. Suffice to say that it requires at least symbolic representation and recursion, features lacking in, e.g., the bee dance or antelope stotting.

usually explicit, however, and is often possibly unknown to the speaker or thinker herself as well as unknown to the audience, supposing there is one. However, we could in many cases elicit from someone who has made a value judgment her tacit criterion by asking her why she thinks what she has said is true. More colloquially, we may ask her: "Why do you say that?" or "What makes you say that?"

I have given an account of the sort of teleology operative in NVE. We will see how it works in regards to ethics in the next chapter. I have tried to show how commonsensical such a view is, and moreover how it underwrites or grounds a certain type of evaluative practice. An important question remains, however. Even if we have shown that teleological thought is quite natural to us, this fact does not justify its use. Just because we believe, implicitly at least, in the existence of teleology, it does not follow that teleology exists. Are there good reasons to believe that there is teleology in nature?

2.4. Arguments for teleology

I will begin by asking why Aristotle believed in "the existence of final causes," or, better put, in the rationality of teleological explanations. Aristotle speaks of two different kinds of teleology, which can be divided into two subsets.[48] Agency-centered teleology concerns the intended, purposeful actions of rational beings. In this class may be distinguished intentional teleology and

[48] Charles 1995; Ariew 2002. The above discussion is especially indebted to Ariew's excellent explication and analysis.

artifactual teleology.[49] The former involves actions of rational agents undertaken for the sake of something, while the latter involves the production of some artifact by rational agents for some purpose. The other large class of teleology concerns organisms. Here we may distinguish between formal teleology, which involves the development of organisms for the sake of self-preservation or species preservation, and functional teleology, which involves those parts of organisms that are present for the sake of their possessor.

What is the evidence for teleology? One might say that *obviously* there are both sorts of agency-centered teleology, that agents do things and make things for the sake of ends. That some actions are intentional in this way is the best explanation for whole large classes of activities and individual actions. Likewise that certain objects are made to perform certain jobs is often the best explanation both for why someone took the trouble to make the object but also the best explanation for the existence of the object. All of this will, I hope, be easily granted. But it may be contested whether biological, nonintentional teleology is the best explanation for parts and processes of organisms. Would a mechanistic explanation of these phenomena work better?

There are three arguments for teleology in Aristotle's *Physics*, each of them a version of the argument strategy known as inference to the best explanation.[50] Aristotle confronts us with a disjunctive syllogism: things in nature arise either

[49] Ariew prefers 'behavioral' to 'intentional'. Although his explication makes clear what he intends, I think this terminology could be misleading, for there are behaviors of both humans and nonhumans that are not intentional though end-directed.

due to chance or for the sake of some end. One thing to note in the development of living things is that things develop in such ways as are useful or beneficial to the organism possessing them. It seems unlikely that such a state of affairs would arise by chance. In discussing this argument from flourishing Aristotle offers a sort of Darwinian argument:

> Wherever then all the parts came about just what they would have been if they had come to be for an end, such things survived, being organized spontaneously in a fitting way; whereas those which grew otherwise perished and continue to perish, as Empedocles says his "man-faced ox-progeny" did.[51]

The best explanation for why living things develop in ways that are beneficial or useful to them is that such development is towards that end. It is a further, Darwinian conclusion, only hinted at by Aristotle, that such ends are there *because* they were beneficial in the struggle for existence.

Aristotle's other arguments in favor of teleology follow the same general scheme. Some natural phenomenon is identified, then it is shown that a teleological explanation works better than a nonteleological one. In the argument from pattern Aristotle notes the way that living things usually tend to grow in the same ways. "[T]eeth and all other natural things either invariably or normally come about in a given way."[52] In the argument from regularity or "hypothetical necessity" Aristotle argues that the fact that certain kinds of matter regularly come

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[50] Ariew 2002.
[51] *Physics* 198b26-34.
[52] *Physics* 198b35.

together to produce parts of organisms is better explained teleologically than as the result of chance.[53]

Some believe that neo-Darwinian theory shows that in actuality there is no teleology in nature. Others hold that Darwinism has redeemed teleological language and explanations. I will not rule on that dispute. But I do think that Aristotle's arguments and the ubiquity of teleological talk in the biological literature show that teleology ought at least to be taken seriously as an explanatory strategy. Moreover, the fact that such explanations appear to work well provides a grounding for belief that there actually is teleology in nature. Consider this a sort of transcendental argument. If one does not buy this, we may still want to consider teleology as a useful fiction, a posit as it were to help explain certain phenomena.[54]

Before moving on to the further discussion of NVE and the role that the virtues play in this theory, it may help to ask with which of the aforementioned kinds of teleology are we concerned in NVE. Recall that these are intentional, artifactual, formal, and functional teleology. The answer is, perhaps surprisingly, all four. In the human case, intentional and unintentional behaviors, artifacts, functions, and forms are evaluated insofar as they contribute to the realization of the characteristic ends of human beings. We might think that ethics, especially perhaps virtue ethics, would deal with intentional teleology, that is, with the rational behaviors of human beings. In many sorts of virtue ethics, including NVE, individual human beings are evaluated insofar as certain of their traits, certain

[53] *Physics* II.9, 199b35-200b10.

dispositions of the will, meet some proper evaluative criteria. We evaluate individuals relative to how their cognitive, conative, and affective states are situated in respect to some *telos*. Also, insofar as laws are a kind of artifact, meant to serve the common good, our evaluations of individual laws as well as other institutions of justice will be grounded in artifactual teleology.

NVE deals also with the nonintentional teleology in nature, that inherent in the parts and processes of life. One thing to recommend the theory is the generality of the logical structure that underlies it. Not only can this logical structure help us make sense of a whole class of ethical evaluations, it also helps us make sense of a whole class of nonethical evaluations of the formal and functional features of living things.

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[54] See Kant's *Critique of Judgment*, §§62-85, especially §79; cf. Ruse 2002.

3. GOOD HUMAN BEINGS

3.1. Good specimens of a kind

The tasks facing the proponent of NVE is to give an adequate naturalistic account of a good human being. A proper understanding of Aristotle's *ergon* argument paves the way for a theory of evaluative judgment. In §3.2 I demonstrate how the move from nonethical to ethical evaluations is accomplished specifically in relation to those human character traits associated with cooperation. In §3.3 I show how this enables us to develop an account of the good human being *qua* human being. Some further considerations and complications relative to this account are explored in §3.4. In §3.5 I show how NVE allows us to derive several of the virtues on the standard list, with special attention paid to the virtues associated with justice and law.

Aristotle's *ergon* argument provides us with a deep insight into the structure underlying an important class of our evaluations. Philippa Foot further develops Aristotle's insight in *Natural Goodness*. She calls attention to the teleology of life, that is, the end-directed parts, processes, and behaviors of living things. Given that living things exemplify teleology (function, purpose), adverting to a teleological structure allows us to evaluate organisms relative to their form of life. Foot writes: "Judgments of goodness and badness can have, it seems, a special "grammar" when the subject belongs to a living thing, whether plants, animal, or human being."[1] The sort of goodness associated with these types of judgments Foot calls "natural goodness." Such goodness—or badness, as the case may be—"is attributable only to living things themselves, and to their parts, characteristics, and operations...."[2] This primary sort of goodness contrasts with a secondary sort, that predicated of artifacts and other nonliving things. We would speak of a good knife or good haircut in this derivative way.

We evaluate living things relative to their species' particular form of life. The parts, characteristics, and operations of such beings have functions that ideally enable their possessor to live the kind of life its species usually does or ought to. That is, these aspects ideally allow organisms to achieve the ends characteristic of their species. We may call a living thing a good example of its kind if its parts, characteristics, and operations enable it to actualize its form of

[1] Foot 2001: 26-27.
[2] Foot 2001: 26-27.

life. This sort of explanation or evaluation is primarily—or "naturally"—applied to living things, their parts, characteristics, and operations.

Further explicating the view, Foot writes:

> [E]valuation of an individual living thing in its own right, with no reference to our interests or desires, is possible where there is intersection of two types of propositions: on the one hand, Aristotelian categoricals (life-form descriptions relating to the species), and on the other, propositions about particular individuals that are the subject of evaluation.[3]

She contends that in evaluating a living thing relative to its form of life we do something like the following:[4]

1. We describe the life cycle of the species, which includes certain ends.

2. We specify a set of propositions saying *how* the ends are characteristically secured for this species.

3. From these specifications we derive *norms*.

4. By application of these norms to an individual of the relevant species we can evaluate that individual.

Once we have understood the form of life of the species and how it attains the ends of that form of life, given the derived norms we can "judge [an instance of the species] to be as it should be or, by contrast, to a lesser or greater degree defective in a certain respect."[5] This is the basic teleological structure that underlies this sort of evaluation.

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[3] Foot 2001: 33.
[4] Foot 2001: 33-34.
[5] Foot 2001: 33-34.

Foot's analysis reveals basically a more elaborate form of Aristotle's *ergon* argument. This chain of reasoning shows us how we derive a norm. Once we have that norm, we can apply it to living things of the relevant species. We can, as it were, hold it up as a sort of standard that members of the kind must meet. It is easy to see then how this structure explains our judging a certain tomato plant as bad or defective. The form of life of tomato plants essentially involves growth. Tomato plants grow by taking in certain nutrients. A good tomato plant, then, is one that takes in nutrients well, for which it needs an adequate root system.

I have demonstrated the logical structure of a certain mode of evaluation, that which appeals to the form of life of a species in evaluating members of that species as good or defective *qua* thing of their kind. So far, I have said nothing about the virtues. In *Natural Goodness*, Foot demonstrates how we make the transition, as it were, from thinking about plants and nonhuman animals, and how we evaluate them relative to their respective forms of life, to thinking about human beings in the same way. When talking about plants and nonhuman animals, these sorts of evaluations seem unproblematic. In addition to being uncontroversial, this sort of evaluation is *objective*. If we know enough about the form of life of a species, so that we are able to specify the natural ends of such beings and how they characteristically achieve those ends, then we can derive norms about members of the species. Having done that, we can apply the relevant norms to a particular member of the relevant species and thereby evaluate that individual, its parts and processes. Such an evaluation is objective in that the

evaluation is grounded by an appeal to species-specific facts. These are facts of life history, of biology.

Following Elizabeth Anscombe's "On Promising and Its Justice,"[6] Foot explains that "much human good hangs on the possibility of one person being able to bind another's will by something in the nature of a promise or other contract."[7] Thus, it seems that, given the limits of human powers, cooperation would for the most part be impossible for us were it not for the fact that we can usually count on others to keep their promises and others can usually count on us. Foot writes:

> The demonstration [that much human good hangs on our keeping promises and honoring contracts] depends on an identification of elements of human good together with a story of what creatures of the human species can and cannot do.... [I]t is "necessary" in many circumstances that human beings should be able to bind each other's wills.[8]

This all seems pretty straightforwardly true and provides little room for argument. The "necessity" spoken of in the above passage is of a kind that Anscombe calls an "Aristotelian necessity": "the necessity," Foot says, "of that on which good hangs."[9] This gloss serves to distinguish this sort of "necessity" from logical necessity, though not from a sort of physical necessity. Given the sort of beings we are and the way our lives go, it is *necessary* for much human good that promises are kept and contracts honored *and* that we can generally count on these things being so. That is, given our form of life, our nature, our ends, there are certain things that we *need.*

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[6] Anscombe 1981.
[7] Foot 2001: 45.
[8] Foot 2001: 46.

Foot goes on to say—realizing that this is the point where things may become controversial—that the sort of derivation that Anscombe goes through in showing the "necessity" of our being able to count on one another in this way is *identical* to the sort of derivation we would go through, for example, in showing that oak trees need a strong root system. First, we specify the *telos* involved. At this point I do not want to attempt to go so far as to specify what the *summum bonum* of human action and endeavor might be, that is, the ultimate end of human action. But in this case we can easily specify the sub-*telos*, a human end that is good: it is cooperation. Perhaps the most common way that human beings characteristically achieve this end is through the "institutions" of promising and contract-making. From these two specifications—the end and the ways those ends are realized—we should be able to derive norms. In this case, the norms could be of various sorts. They could take the form of rules about making and keeping promises, e.g., "You shouldn't break a promise." Or they could take the form of norms about which traits are the virtues, e.g., "Trustworthiness is a virtue." Or they could be norms about what sorts of people are good or bad, e.g., "People who break promises are bad people." We can then apply these norms to individual human beings as well as to their traits and actions. Someone who always breaks promises may have the character trait of being untrustworthy. If that is so, we might call such a person "bad" or even "defective." Note, moreover, that in addition to norms of evaluation we also can derive norms that may be action-guiding, that can tell us what we should and should not do.

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[9] Foot 2001: 46.

Below, after considering Hursthouse's extension of Foot's and Aristotle's ideas, I will show how we may evaluate other human dispositions of the will as good or bad relative to their role in the form of life of our species.

3.2. The good human being

As I have already noted, human beings have a tendency, seemingly natural to us as a species, to make evaluations of people, including ourselves. We think or say things like "Jones is a bad mechanic" or "Smith is a good dentist." When we think or say such things, we usually understand what we mean by these sorts of utterances. Jones doesn't repair cars well; Smith fixes people's teeth well. Speaking the way philosophers are used to, we might rephrase our utterances as follows: "*Qua* mechanic Jones is bad" or "Jones is a good dentist *qua* dentist." Such '*qua*' phrases are tacit, and in most cases it would be otiose to add them. But in such cases we are judging whether certain people are good or bad or mediocre in relation to what they *do*. That is, we are evaluating them relative to their role or their job—or, to return to the Greek, their *ergon*.

We also make other kinds of evaluations of people. These kinds of evaluations are usually called moral or ethical evaluations. For example, we might say, "Jones is a bad human being" or "Smith is a good human being." A question to ask is whether we understand what we mean by such utterances in the same way that we understand those evaluations of, e.g., Jones *qua* mechanic. To justify our evaluations of the characters of Jones and Smith, we might say, "Jones steals, lies, and cheats" or "Jones gives to the poor, keeps her promises, and tells the

truth." Or, we might say, "Jones is dishonest and unjust" or "Smith is kind, honest, and beneficent." The former way is to speak in terms of a person's actions; the second is to speak in terms of certain traits of character, the so-called virtues and vices. As should be apparent to the reader from what has gone before, it is the central argument of this dissertation that many—perhaps most—or our ethical evaluations of human beings are of this sort, at least the ones that are justifiable. That is, these evaluations rest firmly in a teleological framework.

In *On Virtue Ethics*, Hursthouse proposes a criterion for ascertaining which character traits are the virtues: the virtues make their possessor a good human being *qua* human being. The gloss Hursthouse provides for this thesis is instructive: "Human beings need the virtues in order to live well, to flourish *as* human beings, to live a characteristically good, *eudaimon*, human life."[10] Now, on its face, this gloss may not sufficiently distinguish this thesis from what I would count as another thesis altogether. This other thesis is that the virtues benefit their possessor. The confusion between the two claims may result from our commonsense thinking that for some trait to enable a human being to flourish or live well is for that trait to benefit the person. As Hursthouse understands it, however, the thrust of the primary thesis differs significantly from the claim embodied in the subsidiary thesis. She makes the thrust more obvious by what she says elsewhere. We are to understand the primary thesis as the claim that "the virtues make their possessor good *qua* human being."[11]

[10] Hursthouse 1999: 167.
[11] Hursthouse 1999: 192.

What does it mean to say that someone is good *qua* human being? An important point, often overlooked, is that 'good' is not a predicative adjective like 'weighs 900 lbs.'; rather it is an attributive adjective like 'small'. A predicative adjective assigns some property to an object that the object has irrespective of any criterion. Thus, an elephant weighing 900 pounds weighs 900 pounds.[12] On the other hand, an attributive adjective is applied always relative to a specified criterion. A small elephant, then, is not small, except when compared to other elephants. Compared to mice it would be quite large. Also, *qua* elephant it is small, but not *qua* mammal. The same goes for 'good'. A dull knife is not a good knife *qua* knife, since the function of knives is to cut, though *qua* decoration for my mantel it may be a perfectly good knife. In fact, its being dull may make it a better knife *qua* decoration, since then it cannot be used as a weapon. Moreover, and more importantly, 'good' does not change its meaning when we move from talking about a good knife or a good cactus to talking about a good human being, even in cases where we are using the terms ethically. So, when we say that someone is a good person, we usually mean that they are good *qua* person, as opposed to *qua* mammal or *qua* animal. In some, quite rare cases, we could mean 'good' to be taken in one of these latter ways, though that would be a highly unusual context. Of course, perhaps it follows that, if a certain human being is a

[12] Geach 1956. Of course, a 900 lb. elephant would not weigh 900 lbs. on the moon, even though its mass would not change. How much a creature weighs is relative to a particular gravitational field. Moreover, Einstein has taught us that time and space are relative to inertial frames of reference, hence a person's height, e.g., would be relative to how fast she is moving.

good human being, then he or she is *a fortiori* a good mammal and a good animal, since human beings are mammals and animals.

Once we have this idea firmly in mind, that 'good' is applied relative to some criterion of application or relative to some class of things, the second step is to say how it is that we evaluate other types of organisms besides human beings. Hursthouse believes this will help us get a better handle on what she is doing here, as well as help us to understand how such evaluations of human beings are naturalistic. Hursthouse is intent upon making clear the characteristic ends of human beings, as well as other general classes of organism. She thereby avoids a charge that is easily leveled at Foot, namely, that what comprises the human good is left indeterminate. Hursthouse does, however, face the criticism that she got it wrong.

In order to determine whether a cactus, for example, is indeed a good cactus *qua* cactus or whether a wolf is a good wolf *qua* wolf we follow practices prominent in other areas of naturalistic enquiry:

> In the context of naturalism we focus on evaluations of individual living things as or *qua* specimens of their natural kind, as some well-informed gardeners do with respect to plants and ethologists do with respect to animals.[13]

The question, then, is how specifically we are to do this. Hursthouse provides the details. Since plants provide the simplest sort of case, we begin with them. We evaluate a plant as either a good or a bad specimen of its kind by looking at how

[13] Hursthouse 1999: 197.

well two aspects, its parts and its operations, serve two ends, individual survival and continuance of its species (which includes reproduction).

Things get more complex as we move up the "ladder of nature" to the more complex organisms. First, we add a new aspect, which is to be evaluated relative to the ends so far set, those of survival and continuance of the species. When we move from plants to the so-called lower animals, we begin talking about doing or acting. Hursthouse says: "Even fish and birds 'do' things in a way that no plant 'does' things."[14] They locomote; they are animate beings. Thus, in addition to being evaluated with respect to its parts and operations, an animal at this level of sophistication may be evaluated as good relative to its kind in respect to its actions and how well these actions serve the ends of survival and continuance of the species. Animals, generally speaking, obtain nourishment and continue their species in ways much different from the ways that plants do. In short, animals must act. And their actions are a feature of them by which we evaluate them as good or bad specimens of their kind.

We add a third end as we mover further up the "ladder." Beyond survival and continuance of the species, there is "characteristic freedom from pain and characteristic pleasure or enjoyment."[15] Now, as Hursthouse is quick to point out, a capacity to feel pain is necessary for survival, and no doubt evolved as a mechanism to enable animals to avoid damage to their tissues and thus better their chances of survival and continuance of the species. Thus, a complete freedom

[14] Hursthouse 1999: 199.
[15] Hursthouse 1999: 199.

from the possibility of pain would not be beneficial to any animal, and would in fact make it defective; hence, the use of 'characteristic' in describing the freedom from pain. Moreover, animals feel pleasure also in order to make them seek out those things that bring about such pleasure. However, taking an inordinate pleasure in certain stimuli would also be a defect in an organism.

A fourth aspect of the more sophisticated animals closely relates to the ends of characteristic freedom from pain and characteristic pleasure or enjoyment. These are the animal's characteristic desires and emotions. Now it should be fairly obvious how being constituted a certain way with respect to its desires and emotions would serve or thwart an animal's achieving its characteristic ends. An animal that did not desire, e.g., sex (at the right time, in the right way) would not be able to serve well the end of continuance of the species.[16] Similarly, an animal that did not feel fear towards the right sorts of things, e.g., predators, would also tend not to do well toward the end of survival. And not only would this animal probably not survive for very long, but it would also not be able to enjoy the things it would characteristically enjoy. And certainly it would not be well able to avoid pain.

When we get to social animals, of which human beings are a variety, we add another end, which is "the good functioning of the social group."[17] According

[16] There are enormous complications that enter here, which is why I add the parenthetical expression. An animal may forego reproduction at some point in its life history *in order* to enable the continuance of its species. These are the explanations often suggested for why some female primates, for example, continue to live for many years after menopause.

[17] Hursthouse 1999: 201. In a footnote (201n14), Hursthouse does consider the social insects as a "hiccup in this smooth progress," a point well made. She does not

to Hursthouse, "[t]he function of such a group is to enable its members to live well (in the way characteristic of their species)."[18] The parenthetical clause is meant to include those other three ends we have already considered. Since this is the function of a social group, and if a good *F* is one that performs its *ergon* well, then a good social group is one that enables its members to achieve their characteristic ends, and does this well.

Thus we evaluate individual members of one of the more sophisticated social species of animal according to how well its four aspects serve its species-specific ends. It should be readily apparent that the teleological evaluative structure presented by Hursthouse is the same as that presented by Foot and, arguably, by Aristotle. The only difference is that of more specificity and detail as to what is being evaluated relative to what. In examining the form of life of animals such as ourselves, we see that there are four aspects that we evaluate relative to four ends. Hursthouse sums things up as follows:

> a good social animal (of one of the more sophisticated species) is one that is well fitted or endowed with respect to (i) its parts, (ii) its operations, (iii) its actions, and (iv) its desires and emotions; whether it is thus well fitted or endowed is determined by whether these four aspects well serve (1) its individual survival, (2) the continuance of its species, (3) its characteristic freedom from pain and characteristic enjoyment, and (4) the good functioning of its social group—in the way characteristic of the species.[19]

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point out that, given the nature of these insects and their social organization, it is often appropriate to think of individual ant colonies, e.g., as "superorganisms" of a sort.

[18] Hursthouse 1999: 201-202.

[19] Hursthouse 1999: 202.

Once we have this criterion in mind, we should be able to evaluate, more or less, social animals as either good or not so good or bad specimens of their kind. Thus, given that humans are social animals of the relevant sort, an individual's meeting this criterion in the appropriate way should enable us to correctly describe him or her as a good human being.

Thus, we may understand this structure of evaluation in a couple of ways. On the one hand, as just seen, we may understand it as a criterion by which we can evaluate individuals, their parts and processes. This, along with the relevant facts, will enable us to determine, more or less, with certain qualifications, whether an individual is a good human *qua* human. With this criterion, we are provided with a way to assess whether a given human character trait really is a virtue. It is a virtue only if it tends to enable its possessor to realize one or another of the four ends. Note that this way of putting things may be a little misleading, and I want therefore to stress that this criterion leaves open the possibility that the virtues are in some sense constitutive of our ends. The best shot at making a case for this, given Hursthouse's analysis, is that the exercise of the virtues is one of our characteristic enjoyments. For now, we should see that here we have a criterion for the natural goodness of virtue. The virtues make their possessor a good human being *qua* human being, and this we spell out naturalistically via the above analysis.

A second way to understand the structure is as providing a description and explanation of the practices in which we engage. It serves to make plain what it is that we do when we evaluate organisms *qua* member of their respective species.

Whether we make it explicit or not, we appeal to the *teloi* of the species in making our evaluations of members of that species. Of course, as should be obvious, this is not the only type of evaluation in which we engage, and thus the structure is not the only structure. I may evaluate a particular tree, for example, by how much shade it provides in the front yard of my house. Or I may evaluate it in respect to certain nonteleological aesthetic qualities. Aesthetic goodness comes closest, I think, to an autonomous kind of goodness, though I will not explore this idea further.

Hursthouse notes five important things about this structure of evaluation, which are worth reviewing.[20] First, whether these evaluations are true does not depend on the wants, desires, interests, or values of whoever is doing the evaluating. This underscores the fact that this sort of ethical theory is cognitivist. Moreover, as she says, these sorts of evaluations "are, in the most straightforward sense of the term, 'objective'."[21] In fact, farmers, animal breeders, botanists, and ethologists make such evaluations all the time. But we should be cautious here. I am not so sure that what Hursthouse says here holds as well for farmers and animal breeders as it does for natural scientists. Certainly, farmers are interested in seeing their plants and animals do well, in this objective sense of 'do well', and in that sense whether they are doing well or not in no way depends upon what the farmer wants, needs, desires, or values. But there are those cases where the farmer is interested in cultivating some odd, perhaps detrimental characteristic in the

[20] Hursthouse 1999: 202-205.
[21] Hursthouse 1999: 202.

organism. Most of us should be familiar with animal breeders, who in attempting to generate "show" animals often breed in traits that are harmful to that animal. Given this obvious objection, it is best to think here of the evaluations of those students of animals and plants who have no interest in seeing the creatures do or become anything other than what they would in their natural state.

Second, these objective evaluations hold only more or less, or "for the most part," and are "riddled with imprecision and indeterminacy."[22] This is the case due to the overall complexity of the natural world and the epistemic problems that arise due to this complexity. What may look like a poor specimen of species S may actually be a fine specimen of subspecies S_1. Moreover, it often is just hard to tell how and to what degree an organism is good or defective. For it may be good in some ways and not in others. So the overall summing up evaluation will be far from a precise assessment of the organism. In many cases it will be unclear whether an organism is a good specimen of its kind. Moreover, it may be that we arrive at conflicting evaluative judgments about some individual. That is, an individual we might judge as, say, a good primate may not make, say, a good senator. Now, it may be difficult to imagine how someone could be a good human being but not a good mammal, but it is not impossible. However, it could be that some class names, like 'mammal', 'vertebrate', or 'animal' are not fine-grained enough to allow us to make reasonable evaluations. Of course, a sick human is also a sick animal, mammal, and vertebrate.

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[22] Hursthouse 1999: 203.

These considerations as well as others implied by the gradualistic character of evolution may lead us to think that species do not make up natural kinds. But they make up kinds enough to see, for the most part, what their form of life is. Those things that are good for oak trees are not the same things that are good for anteaters. The traits a human being needs to get on well in life are not the same as those a lobster needs. So even though there are no kinds in the organismal world the way that many special creationists imagine there are, there are enough species-specific characteristic for us to make relatively accurate assessments of what would be good for a member of a species. I return to this issue, specifically in relation to neo-Darwinism, in Chapter 5.

Third, there may be further distinctions within a species that need to be made in evaluating a particular example of a kind. For example, in many species males and females have quite different roles to perform and also have correspondingly different physical and behavioral characteristics. They must therefore be judged according to this "sub-kind." Further, more fine-grained distinctions may also be made. An interesting example of this is provided by Christopher Boorse. We make determinations of the health of an individual relative to her or his stage in life. For example, the standards we use for determining the health of infants is not the same as that which we use for determining the health of adults. Perhaps the standards we use for the elderly

should differ from those we use for middle-aged adults and younger adults, although curiously and perhaps tellingly we do not often make such distinctions.[23]

Making a fourth point, Hursthouse claims that the evaluation of an individual as a good specimen of its kind

> identifies it [the organism] as an *x* that is as ordinarily well fitted or endowed as an *x* can be to do or live well, to thrive or flourish (in a characteristically *x* way). What living things *do* is live; quite generally, a good living thing lives well—unless prevented by something outside itself.[24]

This brings the structure firmly back around into the virtue ethics camp, at least insofar as it is the case that when we are talking about an organism "doing well" we mean that it is "living well" or "living a good life characteristic of its species."

The fifth elaborative point Hursthouse makes about such evaluations of living things is that "the truth of the overall evaluation depends in part upon the needs and (as we ascend the ladder of nature) the interests and desires of the *x*s in question."[25] On its face this fifth point appears to conflict with the first one she made. That point was, in her own words, that "the truth of such evaluations does not depend in any way on my wants, interests, or values, nor indeed on 'ours.' "[26] As we have seen the first point is relatively straightforward. Important for calling the theory 'objective' is to show that the overall evaluation does not depend upon the needs, interests, or desires of whoever is making the evaluation. One of the strong points of NVE is that it holds out the promise of providing us with some

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[23] Boorse 1977: 567.
[24] Hursthouse 1999: 205.
[25] Hursthouse 1999: 205.
[26] Hursthouse 1999: 202.

sort of objective foundation for ethics. Doing this distances the theory from the realm of noncognitivist or subjectivist theories of morality, a point that Foot rightly stresses at the outset of presenting the theory in *Natural Goodness*.[27]

In explication of this fifth point Hursthouse writes:

> If "A good human being is one who possesses charity, justice, honesty, courage, etc." is true, its truth depends upon facts about human needs, interests, and desires, just as "A good elephant is one which has good tusks, follows the leader, does not attack other elephants, looks after the young, is not frightened of water, etc." depends upon facts about elephant needs, interests, and desires. How could the truth of evaluations of living things with interests and desires not depend in part upon such facts?[28]

Hursthouse's point is easy enough to understand. We have merely to return to her analysis of what makes up a good animal of one of the more sophisticated sorts. Not only must such an organism be well off with respect to its parts and operations, but also with regard to its actions and its desires and emotions. Thus, the evaluation of such an animal will depend upon what its desires and emotions are like, that is, what sorts of things it desires and what sorts of things it emotionally responds to, and in both cases to what degree it does so. Suppose *x*s make up one of the relevant species of sophisticated social animals. That an *x* is a good *x* depends in part upon that *x*'s being well off in respect to its desires and emotions: it must desire and be affected by those things that help it to reach its characteristic ends.

According to NVE, what *I* or *we* desire for or feel about any particular member of a species has no bearing whatever on the question of whether that

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[27] See ch. 1.

organism is a good or defective specimen of that species. However, if the organism is a member of one of the more sophisticated species, then for it to be a good specimen of its kind it must desire the right sorts of things, namely, those things that serve not to thwart its achieving its characteristic ends. As Hursthouse says, evaluations of human beings *qua* human beings

> depend on our interests and desires because their subject matter is us, namely, animals that *have* interests and desires, just as the true judgments about the psychology or practices of human beings do.[29]

Given that we have interests, emotions, and desires as fundamental constituents of our cognitive make-up, it matters for correct evaluations of us as specimens of our kind that they are a certain way. Moreover, that our interests, emotions, and desires are a certain way is crucial for our achieving our characteristic ends. As Hursthouse says:

> [O]n the naturalistic virtue ethics account, "we," whoever we may be, can no more decide what it is for a human being to be a good human being than we can decide what it is for a cactus to be a good cactus.[30]

Thus we see underscored an important fact about NVE and the kind of ethical naturalism it is, namely, that the theory is objective. *What* exactly it means for a theory—any theory for that matter, not just the ethical ones—to be objective is a difficult matter to settle. Thus I shall not attempt to settle all matters on objectivity, and especially not ethical objectivity.

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[28] Hursthouse 1999: 230.
[29] Hursthouse 1999: 230.
[30] Hursthouse 1999: 240.

3.3. Virtues

3.3.1. Courage, charity, honesty, loyalty, and justice

We have seen what it is that, according to NVE, makes a good human being, or makes a human being good. We evaluate ourselves and one another along the same lines as we do specimens of any species of living thing. Although this view has been presented as central to naturalized *virtue ethics*, I have talked only briefly so far about where the traits of character known as virtues fit in to this account. The virtues are those traits—dispositions of emotion, desire, and will—that lead to or, perhaps, constitute the four characteristic ends of human beings. In this section I look at four paradigmatic virtues. In §§3.3.2 and 3.3.3, I further explore how notions of justice in regard to laws fit into NVE.

As Hursthouse says, our evaluations of plants and animals

> are all concerned with good *x*s as *healthy* specimens of their kind. And one very obvious way in which our ethical evaluations are a bit different is that we hive off overall evaluations that supervene on our evaluations of our physical aspects—our parts and operations, at least—into human biology and/or medicine. The evaluation of someone as a good, physically healthy, specimen of humanity is, for us (as it was not, perhaps, for the ancient Greeks) quite distinct from those evaluations we call 'ethical'.[31]

Since plants have only physical aspects, there is but one science, botany, concerned with them. We can say that gardening also deals with the physical aspects of plants, though in this practice other concerns often enter in besides those directly related to the ends characteristic of plants and how they achieve

[31] Hursthouse 1999: 206-207.

those ends. Animals too have merely physical aspects, but they also have behaviors. Thus there are two sciences that deal with them: animal physiology and ethology. Veterinarians, concerned as they are with the overall health of animals, often concern themselves with both of these aspects, though there are increasingly greater numbers of people devoted primarily to remedying problems in the psychological functioning of animals.

The "merely" physical processes of human beings are studied in the science of human biology, with medicine as the practical side concerned with fixing physical problems. Besides the physical, however, there is also the psychological side of human beings. In saying this I am not assuming psychophysical dualism, only describing what is uncontroversially the case.[32] In a footnote to the passage quoted above, Hursthouse writes:

> The possibly distinct third sort of evaluation [besides the physical and the ethical] occurs in the field of human psychology, but it would need a book on its own to discuss the issue of whether the evaluation of a human being as a good, mentally healthy, specimen can be clearly separated from ethical evaluations.[33]

This issue was actually much discussed in the 1960s and 1970s.[34] One major question concerned the assessment of homosexuality as a mental disorder and the classification of homosexuals as "sick," "perverted," "abnormal," etc. The fact

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[32] We might in this context call to mind various ideas about "supervenience." Some philosophers argue that the mental supervenes on the physical, and others maintain that the ethical supervenes on the physical (presumably nonethical). I do not find this very helpful, and the whole idea may be incoherent (see Kim 1993, essays 4-10). Presumably, in some sense the physical supervenes on the physical. For example, my heart's having the function of pumping blood supervenes on various facts about the molecular constitution of blood, hearts, and perhaps the evolutionary history of human beings.

[33] Hursthouse 1999: 207n21.

that clinical opinion on the mental health of homosexuals has experienced a sea change in the past decades should be some evidence that "scientific" psychological evaluations of homosexuals and homosexual behavior have been deeply influenced by the ethical norms of our society. Moreover, metaethical questions having to do with moral responsibility have been discussed in the context of the nature of the will. Hard determinists believe we have nothing like a free will, and so cannot (or should not) be held morally responsible. Believers in this doctrine might tend to assimilate what we call ethically wrong behavior to psychologically "sick" behavior.[35] I leave these complications aside.[36]

It remains the case that in practice we "hive off" the merely physical aspects of human beings and leave their evaluation to biomedical sciences; and that we "hive off" the merely psychological aspects and leave them for study by psychology.[37] We also add another feature to our evaluative structure, a feature that other animals apparently lack: rationality. Human beings can act from reasons, something that it appears other animals cannot do. Of course, we might ask how we can be so sure that animals, even chimps and dolphins, do not have reason. To make this case, Foot discusses "acting from reasons" as, roughly, having the capacity to articulate in language why we are doing or have done

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[34] See, e.g., Szasz 1961, 1987.
[35] See Morris 1968 (in Murphy 1995: 78) for some interesting quotes by hard determinists (Bertrand Russell among them) who advocate viewing moral wrongdoing as a species of psychological pathology.
[36] It is interesting to note, however, that NVE may be seen as leaning towards a kind of view concerning moral responsibility where bad behavior is assimilated with unhealthiness, and thus treated accordingly. This further implication of NVE (if it is such) will have to be explored elsewhere.

something.[38] Since animals conspicuously lack this ability, we might see it as removing them from the realm of ethical evaluation.[39] I do not have a theory of rationality at hand, and do not at this point feel any pressure to provide one. Obviously we do not evaluate animals ethically, unless we are anthropomorphizing.[40]

So, in the transition from evaluating animals, even of the more sophisticated sorts, to the evaluations of human beings, we add on rationality. Then we have the physical aspects, the emotions and desires, and rationality. But the merely physical is taken out of consideration, so that we are left with rationality and emotions and desires. Are these the sorts of things we have in mind when we evaluate human beings as *ethical* specimens of human beings? Hursthouse believes so: "To possess the virtues is ... not only to be well disposed with respect to actions from reason but also with respect to emotions and desires."[41] The point is a little awkwardly put, but it is just this: being a good human being in the ethical sense is a matter of being a certain way in respect to one's reason, emotions, and desires. One must be rationally, affectively, and conatively correct, as it were. Hursthouse concludes:

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[37] Which is, for good or ill, in its practical form increasingly on the verge of become another branch of biomedicine supplemented by talk therapy.
[38] Foot 2001.
[39] Bruce Waller argues that rationality (or "rational reflection") is not necessary for ethical behavior, but rather only proper intention is. This entails that any animals capable of forming intentions are capable of ethical behavior (Waller 1997).
[40] This is not to say that animals do not have moral worth. That is a different question. I think they do, but the reasons are complex. Moreover, the reasons I would give would entail that plants also have moral worth. But that is another issue. Cf. Attfield 1981 and Goodpaster 1978. See also MacIntyre 1999.
[41] Hursthouse 1999: 207-208.

> Hence the concept of a virtue emerges as apparently tailor-made to encapsulate a favorable evaluation of just those aspects which, according to the naturalism here outlined, are the ethically relevant ones. To be a good human being is to be well endowed with respect to the aspects listed; to possess the human virtues is to be thus well endowed.[42]

Thus we see clearly how the virtues fit into the teleological framework. Being "well endowed" with respect to actions, emotions, and desires means that these aspects are so as to well serve the four ends.

However, as Hursthouse is quick to point out, we still have not verified that courage, charity, justice, *et al.* actually *are* the virtues. To do so we must examine how a certain trait, conceived of in this case as an individual's "endowment" in regard to her actions, emotions, and desires, well or ill serves the characteristic human ends. Recall that these ends are individual survival, continuance of the human species, characteristic freedom from pain and characteristic enjoyment, and good functioning of the social group—all of which are conceptualized relative to the form of life of the species, namely, human beings. To see whether courage, for example, serves these four ends, we must critically examine that trait, perform an "observation" of sorts, which should tell us whether courage is indeed a virtue. Note that this aspect of the theory has a nice naturalistic flavor. We go out and look, as it were, to determine the positive or negative relation a particular trait has to the ends of human beings. Thus, whether a particular trait is or is not a virtue is an empirical matter, to be settled by observational test. In practice, of course, things may not be so simple.

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[42] Hursthouse 1999: 208.

I have already discussed Foot's strategy, derived from Anscombe, for showing that those traits necessary for cooperation between individuals are indeed virtues. Using her more articulated framework, Hursthouse provides the same sort of vindication that Foot provides in the case of the virtues associated with cooperation for courage, charity, honesty, and loyalty.[43] I will briefly survey these, developing my account from Hursthouse's. I also consider justice, a virtue that neither Foot nor Hursthouse consider in much detail.

1. *Courage* either directly or indirectly serves all four ends. We may understand courage as the emotional and volitional disposition to face up to fear, especially fear of dangerous things—that is, things that rightly inspire fear. Aristotle, of course, thought of it mainly as facing fear in martial combat, but we need not limit it to that. Certainly, an individual must often show courage in order to survive. This is not to say that courageous human beings live longer than timid human beings. But the courageous human being no doubt generally outlasts the reckless one. Also, parents need to be courageous to protect the wellbeing and interests of their children. The good functioning of the social group also often requires courage, as does the defense of an individual's own and others' ability to engage in characteristic enjoyments. Moreover, timidity may preclude one's engaging in many enjoyments characteristic of humans. "Faint heart never won fair lady."[44] We can probably find analogs of many human virtues elsewhere in

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[43] Hursthouse 1999: 208-210.

[44] *Don Quixote*, part ii, ch. x. It is clear that this expression was already a platitude in Cervantes' time, for it is prefaced by, "Remember the old saying...."

the nonhuman animal kingdom. Hursthouse suggests that it is plausible that courage plays a similar role in human lives as it does in that of wolves.[45]

2. Although failing to cite a source, Hursthouse writes that she has read of charitable or benevolent acts in both wolves and elephants. We may understand *charity* as a disposition to render aid to those in need. This contributes to the well functioning of the social group, for it increases social stability and cohesion. It can also contribute to individual survival due to reciprocal altruism. If we help those in need, it may be more likely that we will be rendered help when we are in need ourselves. Charity also may extend to children and the infirm elderly, which contributes to continuance of the species as well as the good functioning of the social group.

3. *Honesty*, the disposition to tell the truth, allows us to communicate and is in fact a precondition of it. This serves cooperation between individuals and groups. It also allows for the attainment and transmission of knowledge, which has obvious implications for the well functioning of the social group. Unlike many of the other animals, human beings get much of their knowledge not via instinct but via education. Education, whether in the sense of the imparting of knowledge *how* or knowledge *that*, presupposes truthfulness on the part of the educator.

In his recent *Truth and Truthfulness*, Bernard Williams discusses the "virtues of truth" that he calls sincerity and accuracy.[46] Although his project differs somewhat from that of NVE, it is, importantly, avowedly naturalistic and

[45] Hursthouse 1999: 209.
[46] Williams 2002.

virtue-focused. Williams argues that sincerity, the disposition to tell the truth, and accuracy, the disposition of wanting to possess true beliefs, "are useful, indeed essential, to such objectives as the pooling of information, and those objectives are important to almost every human purpose."[47] Returning to Foot's way of putting things, we might say that much human good hangs on people having those traits. Given the material constraints on human life, it seems impossible that a human society could even exist without them.

4. *Loyalty* is the disposition to be faithful to others. We might think of it as a steadfastness when faced with temptation, since it should be easy to be loyal to a friend or family member if there never arose any temptation to betray that person. Loyalty serves the end of our characteristic enjoyment of loving human relationships. For without loyalty and the trust that follows upon it, we could neither develop nor sustain such relationships. We could further contend that loving human relationships, besides being a necessary condition of humans society, are also among the characteristic enjoyments of human beings. We like having friends; we like being on good terms with our family members. So, not only are loving human relationships good because they are a necessary condition of a human society as such, they are good, as it were, in themselves.

5. Both in itself and considered strictly as a virtue of character, *justice* has proven difficult to understand. Following Aristotle, we may understand justice *qua* virtue (*dikaiosunê*) as the disposition to do what is just.[48] But then we must

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[47] Williams 2002: 57.
[48] *NE* 1129a5-15.

ask what is just. Aristotle notes the homonymous nature of the term, and then continues:

> Both the lawless person and the greedy and unfair person seem to be unjust; and so, clearly, both the lawful and the fair person will be just. Hence what is just will be both what is lawful and what is fair, and what is unjust will be both what is lawless and what is unfair.

Justice, then, comprises what is lawful and what is fair. This is a good first pass at what we think of as justice. We tend to use 'just' and 'fair' as synonyms, when talking about, for example, a distribution of resources. We also, perhaps misleadingly, refer to our legal system as the justice system. However, there is an even more general sense of 'just' which is synonymous with 'right' or 'moral'. It is the latter usage that allows us to say of a particular legal decision that, even though it was in conformity to law, it was nevertheless unjust. Such usage also allows us to say of certain laws that they are unjust and not mean simply that they are unfair.

Aristotle is aware of this distinction. It is correct laws that compel us to do what is in accord with virtue; incorrect laws do this less well.[49] Moreover, the laws themselves

> aim either at the common benefit of all, or at the benefit of those in control, whose control rests on virtue or on some other such basis. And so in one way what we call just is whatever produces and maintains happiness and its parts for a political community.[50]

[49] *NE* 1129b25. Bernard Yack argues persuasively that we should not see in Aristotle's brief comments in *NE* our contemporary distinction between natural right and conventional right. As Yack puts it, "Aristotle ... is not ... defending the existence of natural, inherently correct standards of justice. He is, instead, arguing that the need for citizens to make and argue about judgments of the intrinsic justice of their actions is something that develops naturally within political communities" (Yack 1990: 216.)

[50] *NE* 1129b15ff.

It seems then that justice *qua* virtue is not merely the disposition to obey the law, but the disposition to obey those laws that are just, that is, those that promote the wellbeing of the polis.

Aristotle calls the virtue associated with obeying just laws general justice. The virtue associated with fairness he calls special justice. He does not think an account of general justice is necessary, since, he thinks, general justice amounts to "the whole of virtue."[51] He thinks that special justice, on the other hand, does warrant an account. First, I will consider justice as fairness in Aristotle's terms. Then, despite Aristotle's claims that we do not need to provide such an account, I will consider justice as the disposition to obey just laws and what the nature of those laws might be. We shall see that NVE does an admirable job of accounting for these virtues and also points us in the direction of a natural justification of laws.

On one common construal we can understand justice as the disposition to give to others what is their due. As Foot says:

> Justice ..., as one of the cardinal virtues, covers all those things owed to other people: it is under injustice that murder, theft, and lying come, as well as withholding of what is owed for instance by parents to children and by children to parents, as well as the dealings which would be called unjust in everyday speech.[52]

It seems that Foot's understanding of justice, at least as exemplified in this passage, differs somewhat from what we usually take the term to comprise. To say that murder and lying are concerned with what is owed to people seems rather

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[51] *NE* 1129b25ff.

broad. It could be that we owe people the truth, in some sense, or that we owe them their life, so to speak. It is thought by many that killing someone is unjust because the individual did not get what she deserved. This is the case, perhaps, due to common intuition—though one certainly not held by all—that sometimes people deserve to die. We may think also that people deserve the truth, though I do not think that we owe everyone the truth. Perhaps we have an obligation to be sincere, but this does not seem to be a matter of justice. Of course, there are those cases where someone says something like, "I think you owe me an explanation." However, in such cases it seems that the people involved are in some special relationship, say, a marriage, in which a prior agreement was made. This agreement entails certain obligations, like telling the truth about certain important matters. Leaving these complications aside, I think it best to restrict special justice to fairness in distribution.

Aristotle says:

> One species [of special justice] is found in the distribution of honors or wealth or anything else that can be divided among members of a community who share in a political system; for here it is possible for one member to have a share equal or unequal to another's.[53]

Aristotle considers justice in rectification as another species of special justice. It is unclear what Aristotle takes the distinction to be, except that distribution involves geometrical proportion and rectification numerical proportion.[54] I think we can safely ignore the distinction and focus on justice in distribution.

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[52] Foot 1959; in Foot 1978: 125.
[53] *NE* 1130b30ff.
[54] *NE* 1131b25ff.

There are some problems with Aristotle's account, however. His primary mistake is in associating all species of distributive injustice with the vice of *pleonexia*, or greed.[55] Quite obviously, there could be cases of distributive injustice motivated by a host of other things besides greed. Suppose, for example, that a political figure desires to further her career and believes that she can do so by advocating a law that favors the interests of certain large corporations over a certain group of poverty-stricken citizens. The law, if passed, will have the result of unequally distributing the wealth of the society and thus will be unjust. However, the politician's motive for her unjust action was not greed; that is, she was not motivated by the desire to take an unequal share herself. Rather, her motive was something else: political ambition. Her vice we might call over-ambitiousness, if that is indeed a vice. However, we tend to criticize people we regard as "overly" ambitious when their ambition results in some harm, as this one does. I suggest we could call her vice callousness. Whatever we call it, though, it is not greed.

Aristotle's understanding of justice as fairness also seems mistaken on another count. He says that the things that are subject to apportionment are "honors or wealth or anything else that can be divided among members of a community who share in a political system...." Obviously wealth can be apportioned and therefore be unequally distributed. But it is difficult to understand how honors could be divided. The idea Aristotle might have in mind is something like this. Consider the Academy Awards. Only one person can win the Best

[55] Cf. Williams 1980.

Director award. Aristotle might think that if someone who won this award kept winning it year after year that she would then be unjust. But that seems a little odd. We usually commend people who win honors over and over as being exemplary in their field, not as being unjust. Perhaps, though, a director who wins more than twice should excuse herself from further contention. Still, I do not think this squares with our contemporary intuitions.

Moreover, upon closer inspection it does not seem that wealth *per se* quite fits this model either. We generally think of wealth, in terms of money or capital, as something *created*, not as some finite amount of stuff sitting somewhere, of which each of us deserves a portion. Of course, there are some things, for example land or oil, of which there is a finite amount. It may be more helpful to think of fairness in distribution when thinking of such things of which there are finite amounts. If someone then takes too large a portion, we might criticize that person as having acted unjustly.

How is this idea of justice as the disposition to fairness to fit into NVE? Hursthouse notes that it has "long been a commonplace" that justice contributes essentially to the well functioning of the social group.[56] As noted above, given the kinds of beings humans are—that is, social beings—the other three ends could not be well served unless the social group was relatively well functioning. Now, people generally tend to get angry and quarrel when they perceive that they have gotten an unfair distribution of goods. This can cause social unrest on both small

[56] Hursthouse 1999: 210. She mentions "fidelity to promises" as also serving such a function. I have already covered that virtue above.

and large scales. On the small scale, we know that people who have been cheated tend to get angry and get even. On the large scale, we could have riots or other mass disturbances if a group of individuals feels it has been unfairly treated. From this fact it may be concluded that the virtue of being distributively just, if possessed by enough individuals, would have a salutary effect on keeping the social group in good working order.

Of course, this idea is consistent with everyone merely perceiving that things are justly distributed, and anyone who is only mildly cynical (or realistic) about politics realizes that the dissemination of propaganda that everything is fairly distributed can have a palliative effect, even though things are not fairly distributed. However, there is a deeper sense in which things actually being fairly distributed helps individuals to realize the human goods. For, in order to survive individually, to continue as a species, to enjoy life and avoid suffering, and to function well as a group individuals need food and other resources. We might understand distributive fairness then in the way that Marx did: "to each according to his need." However, this conflicts with another notion we associate with justice, namely, desert. We tend to think, as Aristotle did, that those who work harder or are more talented deserve more than those who work less hard or are less talented.

That we have conflicting ideas of what counts as justice in distribution is well known. It is part of the fuel for many of the political disputes between so-called liberals and conservatives. It could be the case, as Michael Walzer has argued, that there is no single principle of distributive justice, contrary to what

theorists such as John Stuart Mill, Robert Nozick, and John Rawls have argued.[57] I will not here enter into these disputes. However, I have suggested how the virtue of justice, as fairness, could be justified in NVE. Certainly, a treatise could be written spelling out exactly what fairness as a virtue is and how this virtue fits into NVE. Instead of mounting that perhaps monumental task, I want instead to turn to consideration of Aristotle's general justice, that is, the virtue associated with obeying just laws.

Laws are, of course, conventions. They are artifacts devised by human beings to compel or persuade human beings to behave in certain ways. For Aristotle, '*nomos*' means more than merely statutes and common law, but also includes customs. Aristotle recognized that laws or norms can have "indifferent" things as their subject matter, or they can be about quite important things. They are artifices nonetheless. How then are they natural? And how would a naturalized virtue ethics deal with such entities? To begin answering this question, we must first think about two sorts of natural goodness.

3.3.2. Primary and secondary goodness

In explaining the difference in the sort of goodness that living things may have and that similar sort which artifacts may have, Foot writes:

> I think that this special category of goodness is easily overlooked; perhaps because we make so many evaluations of other kinds, as when we assess non-living things in the natural world, such as soil or weather, or again assess artifacts either made by humans as are houses and bridges, or made by animals as are the nests of birds and

[57] Walzer 1983; Mill 1861, Nozick 1974, Rawls 1971.

> beavers' dams. But the goodness predicated in these latter cases, like goodness predicated to living things when they are evaluated in a relationship to members of species other than their own, is what I should like to call *secondary goodness*.[58]

Secondary goodness is that which we may attribute to soil or to weather, to animals and plants that we use to satisfy our own purposes, and to artifacts. The goodness in these latter sorts of cases is derivative because it depends on the interests of animals, primarily human beings. These things are evaluated as good or bad because they serve ends set by us, for example, as opposed to their own ends, set by nature. Foot continues:

> By contrast, *"natural" goodness*, which is attributable only to living things themselves and to their parts, characteristics, and operations, is intrinsic or "autonomous" goodness in that it depends directly on the relation of an individual to the "life form" of its species.[59]

The disagreement I have with Foot on this distinction is probably at root merely terminological. In the remainder of this section I will call attention to the terminological dispute and why I think Foot ought to be more generous in her use of the adjective 'natural'. I will also point out the areas where I think she is dead-on in her account and the place where I think a casual reader could misunderstand her. Understanding the relationship between the teleology of living things and that of their artifacts will help us to understand the relation between virtue and law, to which I return in the final section.

Such good in these special cases Foot refers to as "natural" goodness. She perhaps demonstrates her reluctance to give it this name by her use of scare quotes

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[58] Foot 2001: 26; emphasis added.

around the contentious word 'natural'. She should perhaps have used the term 'primary' to distinguish only those sorts of teleological evaluations that apply to living things directly. But even with that use I am a little uncomfortable. The reason is as follows. While I agree that there are some kinds of evaluations of entities that are dependent on the interests of other living things, usually humans, I think it is misleading to call the primary goodness "natural," for that usage appears to imply that the other, secondary sort of goodness is somehow *un*natural.

Consider the following function statements:

- The function of the human heart is to pump blood.
- A beaver slaps its tail in order to warn other beavers of danger.
- Beavers build dams for shelter, among other things.
- Birds' wings serve the purpose of allowing most types of birds to fly.
- The purpose of nest-building in many species of birds is for the laying of their eggs.
- The function of a knife is to cut.

One thing to note is that these sorts of statements can be expressed using different locutions, e.g., '*x* is the function of *y*' or '*a* does *b* for the sake of *c*-ing' or '*f*s *g* in order to *h*'. I will not dwell at this point on the subtleties that these different locutions might bring out. Each of these statements, conjoined with an appropriate statement of fact about a particular individual relative to the function, will elicit an evaluative judgment. If Sam's heart does not pump blood, then it is a bad or defective heart; if my knife is made of cheese, it cannot cut, and so it is a bad

[59] Foot 2001: 26-27; emphasis added.

knife; and so on. Thus we can arrive at evaluations such as '*x* is a good heart', '*y* is a good knife', '*z* is a good bird (of its species)', etc.

Foot is right to stress that some sorts of goodness and defect attributed to something relative to its perceived *telos* is derivative of the primary usage of that sort of talk, namely, when it applies to parts and processes of living things. Such derivative cases are those where we say things such as "We've been having good weather lately" or "That is bad soil." When we make statements about the weather's having been good lately, we do not mean that the weather, *qua* weather, has been serving its function. I would say unequivocally from a scientific perspective that the weather does not have a function. It does not have a *telos*; neither is it goal-directed nor were its traits selected because they help its ancestors to survive. In short, weather does not have a form of life. Putting things that way underscores the absurdity in taking such claims literally. Of course, there is a strand in the history of human thought, a strand still very much in existence, which insists that the weather *does* have a proper function. We may construe that function as enabling plants and animals to live, or as rewarding or punishing human beings who do what is against the will of God or some other great power(s). Of course, a belief in God or some sort of higher power is not necessary to underwrite the belief that the weather has a function, but such belief does help keep the latter from sounding like a rather odd thing to say. I am, of course, not ruling out the existence of a *telos*, and hence a teleological explanation, for such things as the weather or the soil, that is, that the weather and the soil have characteristic ends. At this point I must confess agnosticism on the subject, though

outside a theological context I find it difficult to understand what the ends of weather and soil might be. What is important to keep in mind, though, is that NVE does not depend on the existence of such teleology. It was not necessary for Aristotle's ethical theory, and it is not necessary for contemporary variants of that theory.

This does not mean, however, that we cannot evaluate the weather or the soil using the logic of teleological explanations and evaluations. But to make the meaning of our utterances explicit, we must say what we think the weather or the soil is good for. Weather that is good for tropical plants will not be good for cacti, just as weather good for outdoor activities and sports may not be so good for growing lush green turf grass. Similarly, soil good for growing one kind of plant may not be good for growing another sort. I think there is nothing wrong with calling these sorts of evaluations "secondary" or "derivative," as long as we do not think of them as somehow un-natural. This terminology is warranted, I think, because weather and soil do not have characteristic ends toward which they tend, at least as far as our science now tells us.

Another important point that Foot brings out has to do with evaluations of one species relative to the interests of another. If we say, for example, "Rex is a good dog," what we mean by that utterance is equivocal. We may mean that Rex is a good dog *qua* dog, that is, a good specimen of that subspecies of canine. On the other hand, we may mean that Rex is a good watchdog, or that he comes when he is called, or that he is gentle around children. In each of those evaluations, Rex

is being evaluated in terms of ends that are good for some human beings,[60] not necessarily good for dogs *qua* dogs. This is not to say, however, that these ends might not coincide. Certainly, given the long-standing and almost symbiotic relationship between humans and dogs, it is reasonable to believe that our interests and theirs will often coincide. The point is that they need not. When we say things such as "He's a good dog" or "She's a good horse," to disambiguate our utterances we must specify the comparison class relative to which we are considering the thing. That is, we must add something like the '*qua*' operator to indicate *as* what sort of being we are evaluating the entity in question.[61] A good horse *qua* horse may not be a good horse *qua* racehorse nor *qua* child's pet. An evaluation of something as good or bad relative to its perceived ends could change drastically depending on the class of functional entities relative to which we are evaluating it. The point Foot stresses, then, is good to keep in mind. Sometimes we evaluate plants and animals relative to our interests, that is, relative to the human form of life. But I think there is something wrong with calling these sorts of evaluations "secondary" or "derivative." Domesticating nonhuman animals is quite natural to humans, as is breeding and growing plants for food, clothing, and so forth.

Birds make nests, beavers build dams, ants construct vast catacombs, humans make knives and computers and nuclear warheads and clothing and on and on. Nest-building is natural to certain species of birds, e.g., robins, just as the

[60] If Rex is a good watchdog, this fact will not be good for would-be burglars.
[61] Cf. Geach 1956.

use of tools is natural to human beings. Moreover, besides tool use, various other things are natural to human beings. These include the use of language and abstract thought, the development of art and culture, the domestication of nonhuman animals, the use of promulgated rules and laws to modify and control behavior. One could extend this list greatly. The point I am making is that it becomes difficult, if not impossible, to separate off except in the abstract living things from what they do and what they make. Certain types of birds build nests. This is an important part of their life cycle, which is crucial for their survival and reproduction. Birds of the relevant species that do not or cannot build nests we may call defective. These nests have a function, a function that is intimately connected to the form of life of these types of birds. It seems odd to say that a certain bird's heart is defective because it will not do what hearts are supposed to do and that this defect is natural, but that its ill-built nest is somehow not naturally defective. If we are unwilling to see beavers' dams and birds' nests as in some sense not quite "natural" because they are artifacts of a sort, we must reject Foot's distinction between primary and secondary goodness. This is not to say that we cannot *in abstracto* separate off the parts and processes of living things from the artifacts they produce. What I am contending is that the goodness or defect of artifacts is not quite so secondary or derivative as Foot seems to imply. Human beings *qua* human beings are tool-using and language-using creatures. The use of such artifacts form an integral part of the human life cycle.

Even though the goodness or defects of artifacts made by humans or nonhuman animals is in no sense un-natural, Foot's point has its merit, and should

not be misunderstood. What we need to keep in mind in any particular case is what it is that we are evaluating. We can evaluate the nest that a bird has built as either good or defective, or we can evaluate that particular bird *qua* nestbuilder. Certainly the quality of the nest gives us evidence to justify our evaluation of the bird. A bird of a nestbuilding species that builds bad nests we can call defective because of the bad nests it builds. According to Foot's terminology, our evaluation of the bird *qua* member of its species exemplifies an instance of "natural" or primary goodness, while our evaluation of the nest *qua* nest exemplifies secondary goodness. Both nests and the nestbuilding behavior, whether learned or instinctual, have characteristic functions: they exist for the sake of something. The *telos* of nests is a safe place for certain kinds of birds to lay their eggs and rear their young. The *telos* of nestbuilding is nests. Both are natural, though the former is an artifact and the latter is not. This is the distinction that Foot wants to make.

The same sort of thing ought to go for human beings as well. Human beings make all sorts of things, all of which may reasonably be called "artifacts," but which differ greatly. A law is very different from a tractor; the stock market differs importantly from a tattoo. We can evaluate laws *qua* laws as we can evaluate lawmakers *qua* lawmakers, etc. Interestingly, if we know its function, we can evaluate an artifact without reference to the person who made it, but we cannot evaluate the artisan without reference to what they make and have made.

To sum up, we can evaluate living things and the things they make using the same logic of evaluation, a logic that is teleological in structure. One mode of this sort of evaluation, which has to do with the evaluation of living things, their

parts and processes, we may think of as primary. Another mode, which has to do with artifacts made by living things, we may think of as secondary. In the case of secondary normativity, the "good for" aspect of the artifact in question ultimately comes to rest in the needs and interests of the creatures that make the artifact.

3.3.3. Laws in nature

We are now in a position to understand how laws, *qua* regulative conventions of human behavior, can have a place in NVE. They are artifacts designed to enable human beings to realize their characteristic ends. We see here a substantial overlap with the thought of David Hume. In Section III of his *Enquiry Concerning the Principles of Morals* entitled "Of Justice," Hume writes:

> Mankind is an inventive species; and where an invention is obvious and absolutely necessary, it may as properly be said to be as natural as any thing that proceeds immediately from original principles, without the intervention of thought or reflection. Though the rules of justice be *artificial*, they are not *arbitrary*. Nor is the expression improper to call them *Laws of Nature*; if by natural we understand what is common to any species, or even if we confine it to mean what is inseparable from the species.[62]

And in Book III of *A Treatise of Human Nature*, section ii "Of Justice and Injustice," Hume writes:

> [T]he rules of equity or justice depend entirely on the particular state and condition, in which men are placed, and owe their origin and existence to that UTILITY, which results from their strict and regular observance. Reverse, in any considerable circumstance, the condition of men: Produce extreme abundance or extreme necessity: Implant in the human breast perfect moderation and humanity, or perfect rapaciousness and malice: By rendering justice

[62] *Treatise*, III, ii, I, 484; emphases in original.

> totally *useless*, you thereby totally destroy its essence, and suspend its obligation upon mankind.[63]

Thus, the human condition as such has required us to formulate the laws that we have. And these laws are just because they allow us to be good human beings; that is, according to the lights of NVE, they provide the circumstances within which we can realize our characteristic ends.[64]

Would just *any* set of rules or laws do? In some cases, the answer is yes. Take, for example, the traffic laws. That we must have laws regarding driving is beyond question. But, for example, that a stop sign is red rather than blue is of no real importance. These are those things about which we would be, in Aristotle's word, indifferent. But once we have established the convention that stop signs will be red we must stick to it. This point need not be labored. There are, however, some laws that govern things about which we are not indifferent. Take, for example, laws regarding the killing of another human being. In most cases, more or less, we consider the killing of another person to be wrong, something from which one should refrain.

NVE can account for both sorts of laws, the otherwise indifferent and the intrinsically important. The former involve cases where we must have *some* law, some regulative norm, though it matters not which we choose, as long as once we have chosen we promulgate the law and stick to it. We need traffic laws, for

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[63] *Enquiry*, III, I, 23-24; emphases in original.

[64] Hume's account of justice is subtle and requires an understanding of other aspects of his thought. Though above I am advocating a "Humean" account of laws, I cannot in good faith say it is Hume's account. For commentary on his account of justice, see Flew 1976, Cottle 1979, King 1981.

people have cars and they drive them. Without such laws, driving may not be impossible, but it would be exceedingly dangerous. Given that we drive, and that we have come to depend upon driving to live our lives—for even in areas that have decent mass transportation systems there still must be traffic laws—our realizing our ends depends on their being promulgated, consistent traffic laws. Less needs to be said about laws regarding the killing of human beings. If anyone could kill anyone with impunity, this world would be much different.[65] In such a world human beings would have a hard time realizing their ends.

NVE provides us an account of laws and their naturalness and also provides us with a means of rationally criticizing those laws. Those laws that do not lay the foundations for human beings' realizing their characteristic ends are not good laws, just as a bird's nest that does not allow that bird to realize its ends is a bad nest. I think it goes without saying that we have yet to see a human society on this earth that had nothing but good laws. The source of law is multiform, with many of them designed not to enable all those subject to the law to realize their characteristic ends, but rather to allow a certain class to achieve *their* ends, which often involve the continued consolidation of political power and accumulation of capital. Further, many laws are mere historical baggage, not well-serving any human ends, but only hanging around, as it were, and often doing more harm than good. There are obstacles to changing laws, obstacles that have themselves often been enshrined as laws. But with NVE we at least have a test of

[65] We need not complicate matters by considering cases where *states* kill people, as in wars, genocides, or executions.

law. Take any particular law. Does it, in its primary effect, enable those subject to it to realize the human ends or does it hinder that realization? If the latter, then it is not a good law and should be abandoned. Of course, in practice, things will be more difficult. That does not mean, of course, that the project is not worthwhile. To the contrary, as Spinoza says in the ultimate sentence of his *Ethics*, "All things excellent are as difficult as they are rare."

4. METAETHICS

4.1 Facts and values

There is an alleged problem for anyone seeking to provide a naturalistic ethical theory: the so-called fact/value gap. This problem has loomed large in the literature since David Hume first raised the issue in his *Treatise of Human Nature*, the idea being further developed by G. E. Moore in *Principia Ethica*.[1] However, when philosophers refer to the "the fact/value gap," "the is/ought gap," or "the naturalistic fallacy," they may be alluding to any of a number of issues, which are not always distinguished from one another. There are actually at least five such "gaps" that have been brought up in the literature: the logical, the semantic, the epistemological, the motivational, and the ontological. It is perfectly legitimate, then, for the ethical naturalist when charged with having illegitimately "bridged"

the fact/value gap to reply: "Which one?" The antagonist will then be obligated to say exactly which gap she has in mind. Once this question has been answered—assuming it can be—it will then be up to the ethical naturalist to show either that no such error has been committed or that there is no such error to be committed.

I group these five issues together under the heading of "fact/value gaps" primarily for pedagogical reasons. Each of them is not, strictly speaking, some sort of gap that needs to be bridged. I could have as well called them "naturalistic fallacies," though the supposedly illicit breech involved in each is not strictly speaking a fallacy of reasoning. I group them together this way because they are usually seen as problems for ethical naturalism *per se.* If the ethical naturalist can provide no plausible response to these objections, then the naturalist project in ethics is stopped before it can even get started.[2] This includes, of course, NVE. These fact/value gaps may be understood as follows.

1. *The logical gap*: value claims are not deducible from nonvalue claims.

2. *The semantic gap*: value concepts are not definable in terms of nonvalue concepts.

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[1] Hume 1739, III.I.1, 469-470; Moore 1903, §§6-15.

[2] In their "Toward a *Fin de siècle* Ethics," Stephen Darwall, Allen Gibbard, and Peter Railton write: "Understanding the commitments of ordinary moral and value discourse and practice would appear to involve accounts of at least the following: the semantics of the language of morals and values; the apparent metaphysical status of moral properties or values; the apparent epistemology of morality or value theory; and the relation of morality or values to practical reasoning" (Darwall *et al.* 1992). Any adequate ethical theory, whether a kind of ethical naturalism or not, must "bridge" or account for the semantic, the ontological, the epistemological , and the motivational "gaps."

3. *The epistemological gap*: value claims are justified in a way different from the way in which nonvalue claims are justified.

4. *The motivational gap*: values can motivate someone to act or give them reasons to act, while nonvalues cannot.

5. *The ontological gap*: values are different in kind from facts.

It would not be presumptuous to see Hume as subscribing to the logical, motivational, and epistemological gaps, and Moore as holding to the semantic, ontological, and epistemological, although neither put things quite this way. Several philosophers have tried to make the proper distinctions among the various issues. William Frankena wrote a seminal paper on the semantic gap—the supposedly illicit bridging of which is usually called "committing the naturalistic fallacy"—to which Moore first called attention. Frankena provides a tripartite taxonomy that includes the logical, the semantic, and the ontological gaps. Javier Rodríguez-Alcázar, though mainly concerned with the epistemological, divides the fact/value gaps into four types. David Brink suggests a fifth, the motivational gap, which he calls the "internalist is/ought gap," for perhaps obvious reasons. Ken Witkowski points out that the fact/value gap is a matter of, as he puts it, justification.[3] All of these gaps are, in some sense, inferential gaps. In suggesting any such gap, one might say, "You can't get there from here," with the specification of the *there* and the *here* determining which gap one has in mind. In

[3] Frankena 1939, Rodríguez-Alcázar 1996, Brink 1989, and Witkowski 1975. William Rottschaefer suggests another gap, which he associates with the genetic fallacy (Rottschaefer 1997). I think he has identified a variant of the epistemological gap.

respect of these gaps, it is perfectly legitimate to ask what it is that antinaturalists want naturalists to do. Do they want us to bridge the gap in question, or show that there is none? Until they specify which gap they have in mind, the answer to that question will vary.

The question of an ontological gap the ethical naturalist may safely ignore for the time being. First, we need some evidence of such a gap. Then we need evidence that it is important in some way, so as to disallow, for example, values being motivating or able to figure into reasoning of various sorts. But there is no good reason to believe in an ontological gap without evidence.[4] It just will not do to say that *obviously* ethical properties are different in kind from other, so-called natural properties. It must be shown. One way it might be shown is by showing that there is some other, unbridgeable gap. But until that is done, there is no good reason to claim that there is an ontological gap. And even if it is shown that there is another gap between facts and values, it must be shown how this makes a difference of a special sort. Any naturalist may with a clear conscience assert that trees are ontologically different from airplanes, or that electrons are different in kind from elections, for by this it is meant only that these things are really different in important ways relative to the ways we carve things up conceptually, that is, ontologically. But none of these kinds is any more, or less, *natural* than the others. The naturalist will attempt to give an account of things that is naturalistic, of course. Now, it may turn out that Hume was right, and that beliefs and desires belong to fundamentally different orders of being, because the latter are

essentially motivating while the former are not. We may call this difference an ontological difference or a difference in kind. But beliefs and desires are both natural phenomena. Or at least that is what minimal naturalism assumes until further evidence should lead us to revise our grounding assumptions. We have no *a priori* reason to believe in an ontological gap. And for any ontological gap to be important it must be the case that the difference in kind between facts and values is so as to disallow some other desirable feature of an ethical theory.

The proponent of a motivational gap holds that values can motivate someone to act or give them reasons to act, while nonvalues cannot. The argument between internalists and externalists about reasons for action may be understood as a argument about whether there is a motivational gap. The externalist thinks there is, but that it can be bridged, for example, by desires. Many have seen this evidence in the "normativity" of values, a property that values supposedly possess and that nonvalues lack. If it could be shown that there is an important motivational gap, then, perhaps this would be evidence for an ontological gap between facts and values. After acknowledging that there is a real issue here, I have two brief points. First, given the project of this dissertation, this is not my problem. Of course, when all is said and done, this may be *the* problem of ethics. Second, others have dealt with this issue.[5] These works are interesting and important, and I think that many of the insights and theoretical innovations could be integrated into NVE.

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[4] Cf. Swoyer 1999.

In the remainder of this chapter I will deal with metaethical issues of logic, meaning and essence, and epistemology, which relate to the three remaining fact/value "gaps." Discussion of the logical gap in §4.2 helps to set the stage and allows us to understand what exactly is at stake in the debates about fact/value gaps. We see in §4.3 that "bridging" the semantic gap involves providing a plausible account or definition of 'good' as used in such locutions as 'a good human being'. Such a definition is possible for NVE, though not required. NVE gives a naturalistic account of a certain kind of goodness. It does not commit a "naturalistic fallacy," nor is it refuted by open question style arguments. Confusion between the meaning of words and the essential properties of things is a mistake to be avoided. In §4.4 we look at the epistemology of NVE. Among other things, we see that NVE faces no problems with an epistemological gap.

4.2. Logic

The logical fact/value gap proponent says that ethical propositions are not deducible from nonethical ones. In what is probably one of the most famous passages in western philosophy, David Hume reports on an interesting observation he has made about 'is' and 'ought':

> 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

[5] See, e.g., McDowell 1979, Smith 1994, Zagzebski 1996, Hursthouse 1999, and several of the essays in Darwall, Gibbard, and Railton 1997.

> 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. But as authors do not commonly use this precaution, I shall presume to recommend it to the readers; and am persuaded, that this small attention would subvert all the vulgar systems of morality, and let us see, that the distinction of vice and virtue is not founded merely on the relations of objects, nor is perceived by reason.[6]

Philosophers influenced by Hume have assumed or argued for a kind of gap between *is* and *ought*. There are two common interpretations of Hume's point about *is* and *ought*. The first, which we may call the narrow interpretation, is the view that Hume is making a point about the difference only between *is* and *ought* and related variants; for example, on the "descriptive" side: *are*, *has*, *possesses*, in short, any word or words that ascribe existence to some object or denote that an object has some natural property; and, on the "normative" side: *must*, *should*, *is required*, *is obligated*, in short, words that are supposed to tell us what we should or should not do. Here the gap is between alleged factual judgments and those that are alleged to be in some sense normative or action-guiding. What we may call the broad interpretation takes Hume's point as being about a gap between not only descriptive language and action-guiding language or concepts, but between fact and value concepts construed more generally, or between all normative-evaluative language and all factual language, for example, between *is* and *good* or between *is* and *virtue*. Commenting on the passage above, William Frankena suggests the

[6] Hume 1739, III.I.1, 469-470.

broad interpretation: "Hume's point is that ethical conclusions cannot be drawn validly from premises which are non-ethical."[7] Many others have agreed with Frankena and understood Hume this way. I am not here particularly concerned with getting Hume exactly right, however, rather with whether what it is generally thought Hume meant is really true.

Consider the following argument:

(A) P1. *a* is *F*.

C. Therefore, one ought to do something (e.g., about *a*).

An ethical naturalist may want to understand P1 construed something like "*a* has natural property *F*". The proponent of the logical fact/value gap would say—or, hopefully, argue—that *any* inference of this sort is *always* a mistake. There is some sort of mistake, of course, but not an outright logical error. For, in terms of explicitly displayed logical validity, something is certainly wrong with arguments like (A). Yet it is not strictly speaking an error of logic; nor does it, as Frankena points out, have anything strictly speaking to do with the fact/value gap as discussed by Moore.[8] The problem, such as it is, is that such arguments are enthymemes: in each case there is at least one missing or suppressed premise. Thus an argument like (A) could be corrected, and the violation of Hume's law avoided, merely by inserting, for example, the following premise:[9]

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[7] Frankena 1939: 467.
[8] Or the naturalistic fallacy. Frankena 1939: 468.
[9] The expression "Hume's law" originates with Hare 1952: 29; cf. Dodd and Stern-Gillett 1995: 741-742, n8.

P2. For any x, if x is F, then one ought to do something.

Once this is done, arguments of type (A) are explicitly logically valid, and thus involve no fallacy of logic. As Frankena says:

> Thus [for example] the Epicurean inference from psychological to ethical hedonism is valid when the suppressed premise is added to the effect that what is sought by all men is good. Then the only question left is whether the premises are true.[10]

Although Frankena considers as his example a move from *is* to *good* rather than from *is* to *ought*, the point is the same. What we have in the case of violations of Hume's law is not a logical fallacy at all. One could avoid violating it just by providing the suppressed premise(s) of one's argument. With such a schema we can move from claims about what is the case to what is right or what is good, as the case may be.[11]

I am not denying that there is a logical gap. I believe that the naturalist and the antinaturalist may agree on this point. They will disagree over the prospect of providing the appropriate bridge premises. The antinaturalist will say that they are not available; the naturalist will disagree. The way to bridge the logical fact/value gap and thereby avoid violating Hume's law is to provide the intervening premise or premises in an argument that moves from premises with only *fact*-type

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[10] Frankena 1939: 468.

[11] John Searle provides an example of this schema, which goes as follows. Suppose Jones verbally promised to pay Smith $5. By so doing, Jones placed himself under an obligation to pay Smith. If one is under an obligation to do something, then one ought to do it. Therefore, Jones ought to pay Smith the $5. Here we have descriptive premises leading from *is* to *duty* to *ought*—that is, from purely descriptive premises to an evaluative conclusion. The example illustrates that the fact/value gap is neither

vocabulary to a conclusion that is of the *value*-type. A colorful example from Charles Pigden helps to drive home the main point here, which is actually about what he calls "the conservativeness of logic."[12] Just as one cannot validly deduce an 'ought' from an 'is', one cannot validly deduce a conclusion about hedgehogs from premises that make no mention of hedgehogs. This point is uncontroversial, or at least should be. Moreover, and more importantly, it does not automatically compel one to posit an is/hedgehog gap to explain this deductive impossibility. A question to ask now, then, is this: Why, if the alleged logical gulf separating *is* and *ought* is more or less the same as that between *is* and *hedgehog*, has there been such heated philosophical debate about the fact/value gap? What is the whole debate about? It would seem odd that so much ink would be spilt in philosophical ethics about the conservative nature of deductive logic. If the fact/value gap really is so trivial a thing, a good question to ask is why ethical philosophers have taken it so seriously. One answer is that there is more than one kind of fact/value gap.

We should note, moreover, that not all ethical reasoning is deductive. Perhaps all reasoning about what one ought to do is pretty much deductive in character, following the rules of the practical syllogism. But there is no good reason, absent some evidence and argument, to believe that all reasoning about, say, what is good or what is virtuous is strictly deductive.[13] Concluding that x is good or that v is a virtue could be thought of as resulting from inductive or

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unbridgeable in principle nor, if Searle's argument is more or less correct, unbridgeable in fact. (Searle 1964).

[12] Pigden 1991: 423-424. See Karmo 1988 for arguments that the logical fact/value gap may be bridged but only trivially; Maitzen 1998 offers a response to Karmo.

abductive reasoning. I am not prepared to further develop this point here in detail, except to point out that it sounds reasonable given certain plausible naturalistic assumptions about method and ontology.[14] Most of the interesting things we know about nature we have gathered through a kind of method appropriate to the subject matter. Many, perhaps most, of our generalizations in this area, about the natural world, have been arrived at ultimately through some kind of ampliative inference, that is, an inference that adds something more to that with which we started. Once we have arrived at certain generalizations about nature, we may then deduce consequences from them that admit of some kind of test, usually conceived of as "empirical" in some sense of that word. The test will involve some sort of direct or indirect observation. But we usually arrive at our hypotheses themselves differently than through deduction.

The sort of ethical naturalism represented by NVE is not in an underprivileged position with respect to the logical gap. It is a problem, as it were, for any ethical theory, whether naturalistic or not. Indeed, it is a problem that vexes all forms of reasoning. But paying careful attention to the logical gap shows us where the work needs to be done for bridging another important fact/value gap. The logical gap is the one case where the bridging metaphor is most apt. For, if we

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[13] Cf. Brink 1989: 169-170.

[14] I say that these assumptions are "plausible," but that is probably true only if one is already committed to a certain form of naturalism. Such a naturalism actually entails these two assumptions, since in effect such a naturalism is composed of these principles. These ontological and epistemological principles would need some defending, however, even *within* a naturalistic framework. A certain kind of Quinean, fallibilist naturalism would maintain that no hypothesis is immune from revision, and this would include even our "first" principles. For, while these principles may guide

are thinking in terms of an enthymeme, we may understand the suppressed or missing premise as a bridge premise connecting the first premise to the conclusion. The question facing the ethical naturalist, then, is what kind of premises to provide, and whether they are plausible. The naturalist, moreover, must provide premises that are in an important sense naturalistic.

What is the sort of enthymeme at issue in NVE?

(B) P1. The *ergon* of a human being is φ.

C. Therefore, a good human being is one who φs well.

This schema, as stated, leaves it open what φ is. However, I have already argued, following Hursthouse, that the *ergon* of human beings comprises at least those four ends of social animals like ourselves. Though we have an idea what those ends are generally, what exactly constitutes them is an empirical question. That is, we discover by observation what the *ergon* or form of life for human beings is. Thus, P1 is, though schematic, a paradigm factual claim. The premise that shall make (B) formally valid is, of course:

P2. For any *F*, if the *ergon* of *F*s is φ, then a good *F* is one that φs well.

This is how, in NVE, we bridge one version of the logical gap. The inference from P1 to C is made explicitly valid by adding in P2. But what sort of claim is P2 supposed to be? That could be the deepest metaethical question specific to NVE.

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our inquiry into what there is and why we ought to believe it, they may eventually have to be jettisoned given new evidence.

Is it a definition? A factual claim? A value judgment? I am not right now prepared to say what sort of claim P2 is, except to note that it does the bridge work needed for the logical gap, so we have not violated Hume's law, if one wants to call it that. The main point to note is how little the existence of a logical gap shows in respect to the supposed impossibility of naturalistic ethics. Due to the conservativeness of deductive logic, one cannot get out in a conclusion a concept that does not appear somewhere in a premise. Thus, there is as much an *is/ought* gap as there is an *is/hedgehog* gap. The logical gap can be bridged, though to do so is trivial. The important question is whether the premises of the argument are true.

4.3. Meaning and essence

4.3.1. The naturalistic fallacy and the open question

Some have thought, and continue to think, that claims like P2, which explicitly contain value concepts, are themselves value judgments of a special sort. In this special sort of value judgment, we are *defining* or giving the *meaning* of value terms like 'good'. However, it is claimed, such definitions are illicit. To define an ethical term in terms of something nonethical is to commit the naturalistic fallacy.

To understand the so-called naturalistic fallacy and whether NVE runs into problems with it, we must first look at G. E. Moore's arguments for this semantic gap. The proponent of a semantic fact/value gap maintains that ethical concepts are not definable in terms of nonethical ones. Some think that the existence of

such a gap precludes the availability of the right kinds of naturalistic bridge premise that would span the logical fact/value gap. Thus, by ostensibly arguing for such a gap in *Principia Ethica*, Moore delivered what many have considered the refutation of ethical naturalism. We will see that Moore's arguments are not a refutation of ethical naturalism. At the most, his discussion of the naturalistic fallacy and the open question expose mistakes that should be avoided, the most egregious of which Moore himself makes: the confusion of meaning and essence. In the remainder of this section I explicate Moore's views and briefly present the standard criticisms. In §4.3.2 I discuss the relevance of the issues raised by Moore to NVE.

Remarking on the question "What is good?" Moore writes: "this question, how 'good' is to be defined, is the most fundamental question in all Ethics. That which is meant by 'good' is, in fact, except for its converse 'bad', the *only* simple object of thought which is peculiar to Ethics" (§5).[15] Moore is quick to point out that he is not concerned merely with how the word 'good' is commonly used, or how it is defined in the dictionary, but rather with what the word 'good' *means* in a quite important sense: "What I want to discover is the nature of that object or idea" (§6). He notes that his answer to the motivating question "What is good?" may be a bit of a disappointment: "If I am asked 'What is good?' my answer is that good is good, and that is the end of the matter. Or if I am asked 'How is good to be defined?' my answer is that it cannot be defined...." (§6). Moore maintains

[15] References to *Principia Ethica* are to section number rather than to page number, as numerous editions exist with different paginations.

that 'good' is a simple notion like 'yellow': "just as you cannot, by any manner of means, explain to any one who does not already know it, what yellow is, so you cannot explain what good is" (§7). This is the case because only complex notions can be defined, whereas simple ones cannot: "They are simply something which you think of or perceive" (§7), and thus cannot be explained—their nature conveyed in a definition—to someone who cannot think of or perceive them. The notions referred to by the words 'good' and 'yellow' are "notions of that simple kind, out of which definitions are composed and with which the power of further defining ceases" (§7).

Again, Moore is not concerned with denying that there exists a merely verbal definition of 'good'. In fact, 'good' is not indefinable in this way (§8). The way in which 'good' is indefinable is in the sense of definition in terms of composition. In giving a definition, "[w]e may mean that a certain object, which we all of us know, is composed in a certain manner" (§8). We may be able to define 'horse' or 'donkey' in terms of their parts, "but there is nothing whatsoever which we could so substitute for good" (§8).[16] And, according to Moore, this is the most important kind of definition (§10). Moore sums up the point this way: 'Good' is one of those innumerable objects of thought which are themselves incapable of definition, because they are the ultimate terms by reference to which whatever *is* capable of definition must be defined (§10). Yellow cannot be defined

[16] There are no quote marks around this use of 'good', although there should be. Moore has a habit of ignoring use-mention distinctions, which perhaps leads him into or at least enables his primary error, that of confusing meaning and essence. See below.

by its "physical equivalent," i.e., the "light vibrations" that "stimulate the normal eye" (§10), for that is not what we mean by 'yellow': "The most we are entitled to say of those vibrations is that they are what corresponds in space to the yellow which we actually perceive"(§10).

Yet, Moore contends, just such a mistake has been made about good. It may be the case that there *are* other properties that correspond to good, properties that all things good *also* have, just as certain vibrations of light correspond to instances of yellow. One commits the *naturalistic fallacy*, says Moore, when one identifies those properties that correspond to good with good itself (§10). What makes the naturalistic fallacy "naturalistic" is that it involves confusing a natural object with a nonnatural one:

> If [the ethical naturalist] confuses 'good', which is not in the same sense a natural object, with any natural object whatever, then there is a reason for calling that a naturalistic fallacy; its being made with regard to 'good' marks it as something quite specific, and this specific mistake deserves a name because it is so common" (§12).

However, as Moore points out, it does not really matter what we call the mistake, as long as we recognize it when we see it.

As a sort of test for exposing the naturalistic fallacy, Moore makes use of what has come to be called the *open question argument*: "whatever definition [of 'good'] be offered, it may be always asked, with significance, of the complex so defined, whether it is itself good" (§13). Thus if someone says that pleasure is good, it still may be meaningfully asked, "Is pleasure really good?" But with any proposed definition of 'good' the question remains open whether the definiens really *is* good. Thus, says Moore: "The mere fact that we understand very well

what is meant by doubting it [e.g., that pleasure is good], shews clearly that we have two different notions before our minds" (§13). So, he concludes, 'good' cannot denote a complex, else the open question would not even be intelligible in such cases. Moreover, similar considerations lead us to reject that 'good' has no meaning at all. For then to ask "Is pleasure really good?" would be tantamount to asking "Is pleasure really pleasure?" (§13). But in such cases where one asks whether pleasure really is good, one is not asking whether pleasure is pleasure, or even whether it is pleasant. So, the open question here shows that 'good' is not meaningless.

Moore thinks he has shown that 'good' does not denote a complex nor is the word meaningless: "Our first conclusion as to the subject-matter of Ethics is, then, that there is a simple, indefinable, unanalyzable object of thought by reference to which it must be defined" (§15). Therefore, *any* attempt to define 'good' as some other, natural property is a mistake: the naturalistic fallacy. Moore believes that this fallacy is the primary reason why many naturalistic ethical theories have been accepted, as well as the reason—properly understood—for why they should be rejected.

Has Moore posed a serious threat to naturalistic projects in ethics? Many philosophers have thought not. Remarking on the naturalistic fallacy, Bernard Williams writes:

> It is hard to think of any other widely used phrase in the history of philosophy that is such a spectacular misnomer. In the first place, it is not clear why those criticized were committing a fallacy (which is

> a mistake in inference) as opposed to making what in Moore's view was an error, or else simply redefining a word.[17]

It is hard not to agree with Williams' assessment of the matter. The proponent of naturalistic ethics could reject Moore's argument on several points. As Nicholas Sturgeon notes, Moore makes two assumptions.[18] First, given such an identity statement as 'good = pleasure', the terms on each side of the identity statement must be synonyms in order for the statement to be true.[19] Second, one may demonstrate that any two terms are *not* equivalent by utilizing the "open question" strategy, the mere fact that we can doubt the statement showing that the terms are not synonymous. Both of these assumptions are dubious.

First, there is the fact—important especially for certain kinds of naturalist—that the analytic-synthetic distinction, which arguably includes synonymy, has been called into doubt. For many it now carries much less weight in argument than it did for Moore.[20] This view is controversial. However, even if we grant that some sort of synonymy is philosophically respectable, it appears that Moore's criterion for synonymy is so strict as to rule out defining anything, and further leads to the notorious "paradox of analysis."[21] His argument depends, as

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[17] Williams 1985: 121.
[18] Sturgeon 1998.
[19] Scheffler notes this problem as the second of Moore's "dubious assumptions," which is "that synonymy or intensional identity is a *sine qua non* of adequate definition" (Scheffler 1953: 464-465).
[20] The literature on the analytic/synthetic distinction is voluminous. Quine 1951 is the *locus classicus*. Scheffler 1953 was the first, as far as I know, to apply this objection to Moore's views.
[21] Frankena charges that the naturalistic fallacy as characterized by Moore is actually an instance of another sort of fallacy that Frankena calls the *definist fallacy*, which is "the process of confusing or identifying two properties, of defining one property by another, or of substituting one property for another" (Frankena 1939: 471). As to the

Gilbert Harman says, on an "arbitrarily narrowed conception of philosophical or scientific definition."[22] Such a concept of definition is so strict as to rule out *any* definition. Given Moore's criterion of a successful conceptual analysis, either no such analysis at all is possible, or if an analysis is possible, and it is correct, then it amounts to a trivial tautology.[23]

Moreover, Moore characterizes naturalistic ethics as a very restricted, analytic-reductionistic kind of theory that no one has ever held. Such an ethical theory opts for some sort of property identification, for example, 'good = pleasure', as its major explanatory *modus operandi*. But such is not the only available option for naturalistic ethics. Moreover, contrary to what Moore thinks, nobody has ever thought that 'good' means 'pleasure' or even that pleasure is identical to good. What philosophers have thought, both naturalists and nonnaturalists, is that something important can be said about the nature or essence of goodness. Moore confuses meaning and essence, and sometimes takes meaning to be denotation or reference, both of which are mistakes that should be clear to all of us by now. Moore's confusion of meaning and essence, his primary mistake, is exemplified by his nonchalance about use-mention. Finally, it is unlikely that mere reflection on "open questions" could provide the sort of doubt that Moore thinks is readily available. Perhaps it could make us doubt that one word means

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supposed "naturalistic" quality of the fallacy, Frankena contends that "the fallacy is always simply that two properties are being treated as one, and it is irrelevant, if it be the case, that one of them is natural or non-ethical and the other non-natural or ethical" (Frankena 1939: 471).

[22] Harman 1977: 19-20; cf. Darwall *et al.* 1992: 115-116.

the same as another, but could it make us doubt that water is H_2O? It seems unlikely.

Given all the problems of Moore's analysis, a question to ask is why his open question argument and supposed naturalistic fallacy have been taken so seriously by philosophers. Some have argued that the influence of the open question argument lies in its bringing to light the curious nature of "normativity."[24] Another answer allows us to be more forgiving towards Moore. Many philosophers confused these issues of meaning, essence, and denotation around Moore's time. It is a clear sign of the progress philosophy of language has made since then that we find his mistakes rather obvious today. Philosophy of language has advanced so far since Moore's day that he seems rather absurd now. Moore, along with many esteemed others, thought that all necessary truths are analytic.[25] One of the morals of 20th century philosophy of language is that there can be necessary truths that are not analytic.

4.3.2. The essence of goodness in NVE

Proponents of NVE are not trying to give a definition of 'good' or any other evaluative or normative words. What is being proposed is an account of one mode of ethical discourse, which has as a part an account of what makes a living thing a good one of its kind. It is not the case that "a good *F* is one that performs

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[23] For more on the paradox of analysis see Black 1944, Fumerton 1983, and Sosa 1983.
[24] Darwall, Gibbard, and Railton 1995.
[25] Putnam 2002.

its *ergon* well" is analytic. Nothing in what I have said depends upon giving this sort of definition of 'good'. The semantic gap is not our primary concern. That said, I think that if there exist thick concepts of the right sort, NVE can bridge the semantic gap. Consider the possible nature of the bridge premises, that is, those premises that allow us to fill out the enthymemes in ethical arguments. There are a few possibilities here. The bridge premises could be:

1. *Wholly descriptive*. None of the bridge premises contain any evaluative concepts whatsoever.
2. *Descriptive-evaluative*. The bridge premises contain "thick" concepts, which are special "hybrid" concepts.
3. *Some descriptive, some evaluative*. The bridge premises contain a mixture of descriptive and evaluative concepts.

I think option 3 may be closed to the ethical naturalist. It certainly is closed to one who wished to be a sort of semantic purist. Option 1 has been tried, though I do not believe it has fared well in the debates. It still seems to leave us stranded, not being able to get there from here. This leaves us with 2 as a live option. Let us consider these thick concepts.

John Searle infamously "deduced" *ought* from *is* through the use of the concept of a promise.[26] One objection he considers to his "deduction" is that 'promise' denotes not a descriptive but an evaluative concept. So, in effect, he has "smuggled" an evaluative concept into his superficially descriptive premises.

"But," he says, "this objection ... begs the question and in the end will prove disastrous to the original distinction between descriptive and evaluative."[27] "If you like, then," he concludes, "we have shown that 'promise' is an evaluative word, but since it is also purely descriptive, we have really shown that the whole distinction needs to be re-examined."[28]

Searle's suggestion sounds more provocative than where he eventually takes it. A related and more provocative statement comes from Bernard Williams. In a discussion of the fact/value gap and the naturalistic fallacy, he says:

> What has happened is that the theorists have brought the fact-value distinction to language rather than finding it revealed there. What they have found are a lot of those "thicker" or more specific ethical notions ..., such as *treachery* and *promise* and *brutality* and *courage*, which seem to express a union of fact and value. The way these notions are applied is determined by what the world is like (for instance, by how someone has behaved), and yet, at the same time, their application usually involves a certain valuation of the situation, of persons or actions. Moreover, they usually (though not necessarily directly) provide reasons for action.[29]

Such thick concepts have usually been explained, Williams notes, by claiming that these concepts are a complex of an evaluative concept and a descriptive concept. Williams rejects this account. Recently, Hilary Putnam has further explored the issue and come to similar conclusions, leading him to reject what he calls "the fact/value dichotomy."[30] I think that the concept of *ergon* may also be a thick concept, as may the concepts of function and form of life. If this is so, and if such

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[26] Searle 1964.
[27] Searle 1964: 49.
[28] Searle 1964: 58.
[29] Williams 1985: 129-130.
[30] Putnam 2002.

concepts can be legitimately used in rational discourse, then NVE has no problem with a semantic gap. Nevertheless, the really important issue is not with meaning but with essence.

What is the essence of goodness in NVE? Among other things, naturalism in ethics involves adopting a certain sort of method, a way of proceeding in our investigation of the phenomena of ethics that is in some sense "natural." This method will involve, at least in part, the giving of definitions. But that will not be *all* that it is, nor is it certain that the giving of definitions will be the most important part. Moore claims that how we define 'good' "is the most fundamental question in all Ethics" (§5). This is Moore's major mistake in method, and provides more evidence of his confusion between meaning and essence. We see from noting this confusion, Moore's primary mistake, that the issues surrounding a possible semantic gap are twofold. The antinaturalist may be claiming that one cannot give a definition of 'good'. To that we respond that we never said we were, though the possibility of how this could be done is shown above. On the other hand, the antinaturalist may be claiming that a naturalistic account of goodness cannot be given.[31]

At the outset of *Nicomachean Ethics* Aristotle provides what may be thought of as a naturalistic account of the good: "that at which everything aims."[32] If we think that the good is that at which things aim, we could say that the ends of organisms, set by nature, constitute their good. Moreover, one who actualizes

[31] See, e.g., Sayre-McCord 1988a (Sayre-McCord 1988b: 288).
[32] *NE* 1094a2.

those ends, which make up the good for that sort of creature, is a good specimen of its kind.[33] The proponent of NVE may contend that there is a necessary *a posteriori* identity between being-a-good-*F* and performing-the-*ergon*-of-*F*s-well. The claim here, then, is that the identity involved is like that between water and H_20 or between genes and DNA strands rather than that between 'bachelor' and 'unmarried male human'. The claim "water is H_20" is not properly called analytic, though it is necessarily true. Still, however, there may be a suspicion that I have provided an account of a kind of goodness not in factual terms, but in evaluative terms. This suspicion will arise because of the word 'well'. The question is whether when we say that some *F* performs its *ergon* well we have thereby expressed an evaluative judgment. There is a sense in which claims like "That robin builds nests well" are evaluative. We could rephrase any such claim in the form of "That *F* is good at φ-ing". But to say such a thing, even if it is a value judgment, is to state a *fact* about some entity. These claims are empirically verifiable; they are testable.

Certainly, Moore's open question could still be asked about this account: "If the *ergon* of *F*s is φ, is an *F* that φs well a good *F*?" Let us fill in this form and see what sorts of answers we would give. Is a knife that cuts well a good knife? Is a robin that builds nests well a good robin? Is a heart that pumps blood well a

[33] Note that it does not appear that we are speaking of the same sort of goodness in both cases. For the ends are, relative to each species, good because they are aimed at, while a good specimen of the kind is good because it has the attributes that enable actualization of the ends. It is with the latter sort of goodness, as it figures in individual evaluations of the traits of organisms, that NVE is primarily concerned. How justify the ends themselves? How indeed!

good heart? Is a human being who makes promises and keeps them a good human being? The answer to all these questions is yes.[34] It would even seem quite odd to claim agnosticism about the proper replies to these questions. Sometimes questions are open only until they are answered. We may, with significance, ask whether someone who keeps his promises is a good human being, just as we may ask, with significance, whether water really is H_2O. The answer we give to the former question depends upon our having investigated the human form of life to see what it requires, as the answer to the latter question requires a rudimentary knowledge of chemistry.

At this point, I remain agnostic about whether the concept of good in 'a good *F*' is reducible in any way, either definitionally or physically. I do think that an organism's performing the *ergon* of its kind well is, as it were, physicalistic, though I do not know whether a *further* microphysical reduction of performing-its-*ergon*-well in terms of other observable entities can be provided. It seems reduced enough as it is, at least for present purposes. However, proponents of NVE are not in any special difficulty here. For such a strong request for reduction in terms of microphysical properties endangers not just ethics but psychology as well. Scientists have so far been unable to give a reductive account of thought. If that is the case, and if the general principle holds, then there is an *is/thought* gap.

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[34] Of course, a person may make promises about things that are bad in other ways. Suppose Jones promised to kill an innocent person and kept his promise. We might say that he's a good promise-keeper but, all things considered, not a good human being. As Aristotle said, in only a slightly different context, "one swallow does not make a spring" (*NE* 1098a20).

But that does not seem right.[35] The argument may be extended as well, I think, to biology and the other special sciences. Ernst Mayr provides a convincing case for the "autonomy" of biology.[36] His case rests primarily on the fact that biology deals with types of entity, namely organisms, which have special properties that inert matter does not have. However, biology deserves the right to be considered a science, despite the impossibility of its theoretical "reduction" to physics. Similarly, the lack of a reductive account of natural goodness is no reason to dismiss NVE as not naturalistic enough.

4.4. Epistemology

4.4.1. Justifying values generally

The important question here is not "How can we deduce an *ought* from an *is*?" or even the more general "How can we deduce values from facts?" The question rather is "Is it possible to justify evaluative or normative claims without assuming anything normative or evaluative?"[37] A naturalist will here be faced with a problem only if he assumes that all "ground level" concepts are non-normative/non-evaluative *and* there is no possible way to justify the latter with only the former. If such a justification cannot be accomplished, then such a naturalist will have a serious problem constructing an ethical theory. Proponents of an epistemological fact/value gap claim that there is an important difference between the way in which we justify our normative/evaluative claims and the way

[35] This argument is provided by Sayre-McCord 1988a (Sayre-McCord 1988b: 258).
[36] Mayr 1996.

in which we justify our non-normative/non-evaluative claims. This leads to some further questions, such as: How do we justify our normative claims? How do we justify our non-normative claims? In the remainder of this section we will look at how we might generally go about justifying value claims. I show that there is no appreciable difference between the modes of reasoning in the ethical and nonethical cases, at least in the examples considered. In §4.4.2 I show specifically how NVE avoids any sort of epistemological gap.

Consider some examples and how we might justify certain sorts of claim. I say, "The cat is on the mat." You ask me to justify this claim. I respond by saying, "I just saw her there asleep." My justification comes from my having seen the cat and the background knowledge I have about the sleeping habits of felines. But what if you ask me at a later date, "Where's the cat?" And I respond, "She ought to be on the mat." This claim has the appearance of a normative claim.[38] But I would justify it exactly as I would justify the previous claim, by appeal to what I had just seen and my background knowledge about felines. But it may be objected that this predictive or theoretical sense of 'ought' is not normative, as that category is usually understood. So what we have done is only shown that two descriptive claims are justified in more or less the same way.

Suppose you say to me, "I want to go to graduate school," and I say, "You ought to take the GRE." How do I justify my claim? I might say that if you don't take the GRE, then you cannot possibly go to graduate school, since the GRE is

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[37] Witkowski 1975, Allen 1972.
[38] Allen 1972.

required for admission. That is, taking the GRE is a necessary condition for getting into graduate school. I have justified the normative claim by appeal to what it takes to get into graduate school, that is, by appeal to the facts. Again, someone might object that such means-end types of claims are not the usual sort of normative claim. For they merely give, in our example, necessary conditions that must be fulfilled to achieve some end. In other cases, they might prescribe the most efficient way to achieve some end, for example, "If you want to avoid heavy traffic, do not drive during rush hour." These types of 'ought' claims are often called practical or prudential.[39] They are also often called hypothetical, for they depend on some prior condition's being met, and can be expressed in the form of if-then statements.

What of other, less controversially *moral* normative claims, for example, "You ought not lie" or "You ought to be kind"? It is often said that such claims are categorical, as opposed to hypothetical. Of course, such claims could be expressed as the consequent of hypothetical claims: "If you don't want a bad reputation, then you ought not lie"; "If you want people to like you, then you ought to be kind." If one proceeds in this fashion, then one reduces all moral claims to hypothetical claims.[40] If this is the case, then these claims will be justified the way other hypothetical claims are justified: by appeal to the facts. If moral claims are all hypothetical claims, then the way they are justified is the

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[39] Allen 1972.
[40] Cf. Foot 1972, and the addendum added in Foot 1978.

same as the way other hypothetical claims are justified. The question, then, is whether moral claims are actually all hypothetical claims.

How would we justify this claim: "If you don't want a bad reputation, then you ought not lie"? We would have to show that lying leads to a bad reputation. Does it? Well, only if one gets caught lying *and* your getting caught becomes public knowledge. If that is the case, then the hypothetical is better expressed as "If you don't want a bad reputation, then you ought not get caught lying; and if you do get caught you ought to make sure it doesn't become public knowledge." But that does not sound like a moral claim; in fact, such a claim seems to be *opposed* to a moral outlook. Yet, it may be countered that the best way to avoid being caught in a lie is not to lie. So, the original hypothetical claim stands. But, of course, if the person does not care about whether he has a bad reputation, then the antecedent is not satisfied, and so the consequent does not follow. Of course, people do care about their reputations, too much sometimes. And it seems reasonable that, if someone did not care at all about her reputation, she would have trouble getting on well in life.[41]

It may be a psychological fact about human beings that each normal person desires to flourish, to be happy and to do well in life. In this sort of case morality is neither categorical nor hypothetical. Since everyone desires happiness, the

[41] There are many subtleties I have glossed over here. There are people, e.g., rock and hip-hop artists, who cultivate a "bad" reputation in order to be successful. Others disregard their reputation in order to pursue some ideal of justice. To be virtuous one must be concerned with one's reputation, but not with honor for its own sake. The good human being will desire to be honored by the right people for the right reasons. The righteous might expect a bad reputation amongst the wicked.

moral norms turn out to be hypothetical in form. However, the norms are not hypothetical in Kant's sense, because it is not up to you to want happiness or not. By nature we all want happiness.[42] You cannot opt out; thus the antecedent of the "hypothetical" is always satisfied. An ethical naturalist can say, then, that there is some "naturalistic" way that we can use to justify our normative/evaluative claims and that this method is more or less the same method we use to justify our non-normative/non-evaluative claims. Thus, there is no epistemological gap. A certain sort of naturalist virtue theorist will say that the way this process of justification is carried out is by appealing to certain facts about human nature and human flourishing.[43] These facts may be discovered through the usual methods by which facts are discovered. As I have been developing the theory, NVE is not such a welfare-based ethical theory, though the teleological structure is parallel.

4.4.2. Justifying values in NVE

Although they do not say so explicitly, given their ethical views both Hume and Moore may be seen as subscribing to the existence of an epistemological gap. For, if the "derivation" of values from facts requires the addition of some affective state, as Hume maintains; or if values and facts are radically different in kind, the apprehension of the former requiring some special

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[42] Thomas Aquinas explicitly expresses such a view (*Summa* I-II, Q. 5, Art. 8). I think it arguable whether Aristotle does.

[43] Important issues are whether it is possible to specify what counts as human nature and human flourishing *independently* of constructing a virtue ethical theory, or whether the facts discovered will themselves be non-normative or non-evaluative. Cf. Annas 1993: 136.

faculty of intuition, as Moore seems to think; then it stands to reason that the way in which we justify factual claims should differ from the way in which we "justify" evaluative claims. The epistemological gap may come in stronger and weaker forms. The stronger form is the position that value claims are justified in a way different from the way in which nonvalue, merely factual, claims are justified. I call this a type 1 epistemological gap. The weaker form, on the other hand, restricts the scope to the realm of values. The proponent of the type 2 epistemological gap maintains that ethical value claims are justified in a way different from the way in which nonethical value claims are justified. In this section I argue that, in at least the general sort of case operative in NVE, there is no epistemological gap of type 2. Showing this also throws into question whether there is, in this general sort of case at least, a type 1 gap.

The crucial idea is that there is an identity between the logical structure underlying a certain class of nonethical evaluations of living organisms, human and nonhuman, and the logical structure underlying a certain class of ethical evaluations of human beings. As we have seen, a certain way of evaluating living things is consistent across domains—whether the organisms being evaluated are human or nonhuman and whether the evaluations are ethical or nonethical. By showing this we also show that, in this particular case, there is no epistemological gap.

Oak trees have the ends of development, survival, and reproduction. In order to actualize these ends, an oak tree needs a strong root system. From these specifications of the ends and the ways in which those ends are characteristically

realized, which together partially make up the oak tree *ergon*, we can derive the following norm: "A good oak tree is one with a strong root system." We can then apply this norm to individual oak trees and evaluate them *qua* oak tree. Such evaluations properly belong to the naturalistic discipline of botany. Similarly, the wolf form of life involves getting adequate nutrition, which requires hunting in packs. Specifying these aspects of the wolf *ergon*, we can infer that a good wolf is one that hunts with the pack. A lone wolf, then, is a defective wolf. Depending upon the source of the wolf's defect, this evaluation may belong to the naturalistic disciplines of animal physiology or ethology. We can apply the same sort of structure of evaluation to nonethical attributes of human beings, which include the merely physical functioning of each individual's body, its parts and processes. Thus, for example, we can evaluate an individual's heart as good or bad relative to how well it performs its function of circulating nutrients in the individual's body. We may also wish to evaluate the psychological aspects of human beings. If we are speaking of the merely physical aspects of human beings, the judgment belongs to physiology and medicine. If we are speaking of the psychological aspects, it belongs to psychiatry.

In chapter 3 I showed how ethical evaluations fit into NVE. The sort of derivation we may go through in showing the necessity of our being able to count on one another in this way is identical to the sort of derivation we go through, for

example, in showing that oak trees need a strong root system or that wolves need to hunt in packs.[44]

I have explicated the logical structure of a way in which we justify certain kinds of nonethical evaluations of nonhuman organisms. I have smuggled nothing normative or evaluative into the basic structure. That is, the evaluations are not there as *premises*, but rather come out as *conclusions*. Someone may, however, contend that there is an evaluative claim smuggled into the argument. This is the claim: "For any kind of thing *F* that has an *ergon*, if the *ergon* of *F*s is φ, then a good *F* is one that φs well." Although this claim contains an evaluative element, the overall claim is not itself evaluative. It is, though, a certain kind of bridge principle.[45] We may summarize the argument against the existence of a type 2 epistemological fact/value gap as follows:

1. If there is a type 2 epistemological gap, then the way we justify ethical claims is different from the way we justify nonethical value claims.
2. But the logical structure underlying a certain class of ethical evaluations of human beings relative to their form of life is identical to the logical structure underlying a certain class of nonethical evaluations of human and nonhuman organisms relative to their forms of life.
3. Therefore, there is no type 2 epistemological gap.

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[44] Or that bees need stings; cf. Geach 1956. Note, moreover, that in addition to norms of evaluation we also can derive norms that may be action-guiding. This is a controversial and complex topic. Foot and Hursthouse, two of the most prominent advocates of naturalized virtue ethics, appear to differ on this issue; see Foot 2001: 52-65 and Hursthouse 1999: 194, 236-237.

I have not tried to show that there is no difference between the way we come to factual judgments and the way we come to evaluative judgments, although I did call that into question above. I have shown, rather, that the logical structure underlying a certain kind of ethical value judgment is identical to the logical structure underlying a certain kind of nonethical value judgment. Underlying—or *grounding*—both sorts of evaluations is a natural teleological structure. Recall the definition of ethical naturalism offered in chapter 1. It is the view that ethics is, somehow, grounded in natural facts, that is, in the rest of nature. NVE provides an account of that 'somehow'.

There are a few options available to the antinaturalist. Someone trying to defend the existence of an epistemological gap may suggest weakening the principle underlying belief in such a gap. The principle is, put bluntly, that *in all cases* the way in which we justify ethical claims is (fundamentally, radically) different from the way in which we justify nonethical claims. The antinaturalist might suggest replacing the italicized words by 'in most cases' or 'in some cases' or perhaps 'in all but one sort of case'. The virtue ethical naturalist, however, should have no problem with this suggestion. For it does not touch anything so far said, as long as we are clear that the sort of teleological structure of evaluation just demonstrated is one case that the weakened principle of the epistemological gap leaves alone. This response, then, may be ignored.

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[45] Cf. Scott 1980.

To consider a second reply the antinaturalist might attempt, let us return to oak trees for a moment. This will call attention to an interesting implication of the preceding demonstration and also allow me to challenge the antinaturalist's possible reply by confronting her with a dilemma. Say we have judged that a particular oak tree is a healthy oak tree, an evaluation arrived at by means of the logical structure discussed above along with certain facts about oak trees and about this particular oak tree. One way to think of this judgment is as a value judgment based upon certain factual judgments. If we think of our judgment in this way, given what has already been shown, there is no epistemological gap of type 2: certain ethical and nonethical value claims are justified in the same way. But another way to think of this judgment is as a factual judgment based upon certain other factual judgments. If we think of our judgment in this second way, given what has already been shown, there is no epistemological gap of type 1: certain value and nonvalue claims are justified in the same way.

A dilemma now confronts the antinaturalist. In defending the antinaturalistic position against the onslaught just waged, the antinaturalist may decide upon one of a pair of argument strategies. It may be claimed that the evaluations of the parts and processes of plants and nonhuman animals and those of human dispositions of the will are either (a) all ethical or (b) all nonethical. If option (a) is taken, it must be shown, for example, that "*x* is a good tomato plant" is an ethical evaluation. That is a difficult position to maintain, however. On the other hand, if option (b) is taken, it must be shown, for example, that "John is a good human being" is a nonethical evaluation. That position, however, is equally

problematic. The claim "John is a good human being," where 'good' is understood as describing or attributing a property to some aspect of John's character, looks like a paradigmatic ethical claim. If the antinaturalist wishes to stand firm in this way, it must be claimed either that our evaluations of plants and animals are ethical evaluations or that our evaluations of human beings' characters are nonethical evaluations.

We do not have to make such a choice, and I think to do so would be a mistake. But let us suppose that we have to take one or the other of the antinaturalist's proposed options. If "*x* is a good tomato plant" is a judgment we arrive at by analyzing certain biological facts about tomato plants and facts about a particular tomato plant *and* it is an ethical evaluation, then we have arrived at an ethical evaluation through consideration of facts. In that case, there is no epistemological gap. And, if "John is a good human being" is a judgment we arrive at by analyzing certain facts about human beings and facts about John *and* it is *not* an ethical evaluation, then we have arrived at a nonethical evaluation through consideration of facts. In this case, it seems we just must have been mistaken when we called our evaluation of, say, John's ability to keep his word an *ethical* evaluation. Again, as in the former case, there is no epistemological gap.

The proponent of an epistemological fact/value gap maintains that value claims are justified in a different way than are nonvalue claims. The existence of such a gap is supposed to spell the death of ethical naturalism. I have shown that NVE does not fall prey to this gap. There is a class of ethical judgments concerning human beings that are justified in a way logically identical to the way

in which we justify a certain class of nonethical judgments about human and nonhuman organisms. This demonstration serves three important ends. First, it further lends plausibility to NVE. Second, it calls into question the very notion of an epistemological gap. Third, it confronts antinaturalists with a difficult dilemma. NVE more than adequately deals with the epistemological issues. Its inferences about good human beings are justified in the same way as its inferences about good oak trees and good wolves.

5. NATURE

In the preceding chapters I laid the groundwork for a naturalistic, neo-Aristotelian, teleological virtue ethics. According to this theory, naturalized virtue ethics or NVE, a good human being is one who possesses those character traits that either lead to or constitute the characteristic ends of human beings. This way of evaluating human beings is identical to the way we evaluate nonhuman organisms. I also answered some objections and, I hope, allayed some fears that one might have about certain metaethical issues surrounding the theory.

In this final chapter I will map a bit of the ethical-theoretic terrain, showing where NVE should be placed amongst other virtue theories. I also compare and contrast NVE with two other theories with which it might be confused: welfare-based virtue ethics (a kind of eudaimonism) and evolutionary ethics. Although NVE shares similarities with these theories, it is not identical to either.

I will also consider NVE in relation to a well-established nonethical theory, the neo-Darwinian theory of evolution. Some believe that the facts of evolution entail problems for ethical naturalism in general and in particular for teleological human nature theories like NVE. NVE assumes a continuity between human beings and the rest of nature. To say that is to say, among other things, that human beings are an evolved species. Some might think that the facts of evolution imply that all humans are suboptimal or, worse, that there is no human nature. For most of the second half of this chapter I consider these issues and show that NVE is not threatened by the facts of evolution. Naturalized virtue ethics is consistent with biological science. In the final section I make brief suggestions for further research.

5.1. Classifying NVE

5.1.1. Virtue ethics and virtue theory

What is virtue ethics? Some think that we can provide no simple answer to that question. However, such a condition also confronts deontology and utilitarianism, virtue ethics' alleged theoretical rivals. Thus critics make an untoward demand on proponents of virtue ethics. Hursthouse writes:

> The demand that virtue ethics, unlike the two other approaches, should be able to state its position succinctly, in terms both sufficiently broad (or disjunctive?) to get all virtue ethicists in and sufficiently tight to keep all deontologists and utilitarians out, seems a bit excessive. Why should anyone expect us, uniquely, to be able to do it?[1]

[1] Hursthouse 1999: 4.

However, this inability to say exactly what virtues ethics is may be the case because, as Daniel Statman says, "The expression 'virtue theory' and 'virtue ethics' have been used in a rather broad and undefined sense."[2] However, since the 1980s there has developed a growing consensus.

It is now something of a commonplace to list virtue ethics as an alternative to the two other predominant approaches to philosophical ethics, the utilitarian-consequentialist and the Kantian-deontological.[3] It is said that, contrary to utilitarianism, which emphasizes the consequences of actions, and deontology, which emphasizes duties or rules, virtue ethics emphasizes the virtues, or human character.[4] Saying that a particular approach "emphasizes" a certain feature may be misleading, or as best less than informative. Depending upon the issues with which the utilitarian or deontologist finds herself concerned at a particular time, she may emphasize the virtues. For example, both Kant and Mill have quite a bit to say about the virtues.[5] The important difference between these three views lies in the different reasons a proponent would provide to explain why the virtues are good to have, or why one ought to have them. The main difference, then, lies in

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[2] Statman 1997: 7.
[3] Crisp 1996a, Hursthouse 1999.
[4] " 'Virtue ethics' is a term of art, initially introduced to distinguish an approach to normative ethics which emphasizes the virtues, or moral character, in contrast to an approach which emphasizes duties or rules (deontology) or one which emphasizes the consequences of actions (utilitarianism)" (Hursthouse 1999: 1).
[5] Mill, *Utilitarianism* chs. 2, 4, and 5, *passim*. In §2.1.7 of the second *Critique*, Kant writes: "This holiness of will is, however, a practical idea, which must necessarily serve as a type to which finite rational beings can only approximate indefinitely, and which the pure moral law, which is itself on this account called holy, constantly and rightly holds before their eyes. The utmost that finite practical reason can effect is to be certain of this indefinite progress of one's maxims and of their steady disposition

how the virtues are justified, or as we may also put it, how their goodness is explained. Deontologists will understand virtues as those traits that tend to cause their possessor to produce right actions, with what counts as a right action left to be determined by the particular theory. A Kantian, for example, would say that a virtue is a trait that predisposes its possessor to perform those acts the maxim of which may be universalized. That is why virtues are good. Utilitarians will understand virtues as those traits that tend to cause their possessor to maximize the good, with what counts as the good left to be determined by the particular theory. For example, a certain sort of utilitarian desire theorist will say that a virtue is a trait that predisposes its possessor to perform those acts that maximize the satisfaction of her and everyone else's desires.[6] That is the explanation for the goodness of those traits and the reason we call them virtues.

In contrast to deontology and utilitarianism, in virtue ethics the virtues are not justified in terms of right acts or outcomes of acts. The question, then, is how they are justified. Statman writes:

> The prevalent answer is that according to [virtue ethics] the virtues are justified in terms of their essential role in the wellbeing of the agent. Virtues are viewed as necessary conditions for, or as constitutive elements of, human flourishing and wellbeing. Understood in this manner, the primary concept in ethics would be that of human flourishing, from which we could somehow derive the virtues, and then proceed to infer judgments about actions.[7]

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to advance. This is virtue...." I am, of course, ignoring subtleties in both Mill's and Kant's thought. There are meant to illustrate a type of justification of the virtues.

[6] Cf. Sumner 1996: ch. 5.

[7] Statman 1997: 8.

However, a dependence upon a teleological structure is not essential to virtue ethics. "What is essential," Statman says, "is the idea that aretaic judgments, i.e., judgments about character, are prior to deontic judgments, i.e., judgments about the rightness or wrongness of actions."[8] The primary distinction is that between the direction of justification, which may be expressed in the form of a question: Are the virtues justified in terms of right action, or are right actions justified in terms of the virtues? Or, put another way: Which have evaluative priority, actions or character?

A virtue theory may be understood as a theory in which, as Statman puts it, "the basic judgments in ethics are judgments about character."[9] However, this may rule out many theories that have been called virtue theories. To preserve a broader category, we may say that the priority of virtue is not a necessary condition of a theory's being called a virtue theory. Virtue theories may be classified in degrees of strength. The weakest form, according to Linda Zagzebski, "focuses on virtue, not because it maintains that the concept of virtue is more fundamental than the concept of right act, but because it contends that the concept of virtue offers the most useful *criterion* for the rightness of an act."[10] Michael Slote calls such theories *agent-focused.*[11] Obviously, such a theory would be *prima facie* consistent with either utilitarianism or deontology.

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[8] Statman 1997: 8.
[9] Statman 1997: 7; italics removed.
[10] Zagzebski 1996: 78.
[11] Slote 1995.

As we move on to stronger versions of virtue ethics, we find a terminological dispute. This dispute concerns what counts as a "pure" virtue theory. Roger Crisp understands a pure virtue theory as one in which "the only reasons we ever have for acting or living in any way are grounded in the virtues."[12] Crisp cites Aristotle as one of the few such pure virtue ethicists. This may seem odd to some, who are used to understanding Aristotle as having grounded the goodness of the virtues in their contribution to *eudaimonia* or the good life for a human being. However, as Crisp and Slote point out:

> Aristotle ... argued that the best life for a human being—*eudaimonia*—consists in the exercise of the virtues (or the 'excellences'). Indeed his is perhaps one of the most radical virtue ethics ever, since he can be understood to be saying that there is *nothing* worth having in life except the exercise of the virtues. This is the view which was taken up and developed by the Stoics.[13]

According to the account offered by Crisp and Slote, Aristotle is a pure virtue theorist as well as a quite radical one, perhaps the most radical ever. Statman categorizes a pure or radical virtue ethics in more or less the same way.[14] Such theories Slote calls *agent-based.* "This type of theory," Zagzebski writes, "makes the virtue, motivation, or other internal states of the agent ethically

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[12] Crisp 1996a: 7. He continues: "The fact that some way of life instantiates the virtues of justice, honesty, generosity, and so on constitutes the sole reason for pursuing it; and there is no reason to pursue any other kind of life." Although these may constitutes reasons for pursuing a certain kind of life, it is unclear that such considerations would appear in a kind of practical syllogism explaining or justifying a person's actions.
[13] Crisp and Slote 1997: 2.
[14] Statman 1997: 7n32.

fundamental."[15] Included in this category would be the views of Martineau, Slote, and Zagzebski.[16]

Zagzebski, however, has a different, more inclusive notion of what counts as a pure virtue theory. She writes: "By a pure virtue theory I mean a theory that makes the concept of a right act derivative from the concept of a virtue or some inner state of a person that is a component of virtue."[17] According to Zagzebski, there are two kinds of pure virtue theory. First, there are good-based virtue ethics, in which the goodness of the virtues derives from their relation to some other good. Slote calls such views *agent-prior*.[18] Zagzebski contends that Aristotle's theory is most "naturally interpreted" as this kind of virtue theory.[19] Also in this group would fall the theories of Hursthouse and Foot, as well as the neo-Aristotelian view advocated by Alasdair MacIntyre.[20] Good-based theories would fall somewhere on the spectrum between merely agent-focused virtue ethics and agent-based virtue ethics.

A further distinction that may be made is between extreme and moderate virtue theories. In moderate virtue theories, all judgments of character are independent of judgments of acts, although at least some judgments of acts are

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[15] Zagzebski 1996: 80.
[16] Martineau 1885, Slote 1995 and 2001, and Zagzebski 1996.
[17] Zagzebski 1996: 79.
[18] Slote 1995.
[19] Zagzebski 1996: 80. The above foray into ways of classifying virtue theories leads us to a strange impasse concerning Aristotle's view, and by extension any theory that would call itself Aristotelian or perhaps even neo-Aristotelian. There important interpretive questions about how "radical" or "pure" Aristotle is in his virtue theory. It has been argued further that he is not really a virtue ethicist at all, the evidence being his remarks about some acts being, as it were, beyond the pale, e.g., adultery (see Santas 1993).

independent of judgments of character. In extreme virtue theories, no judgment of an act is independent of judgments of character. If we subscribe to an extreme theory we have a pair of options when it comes to deontic concepts or language. Either we can use the language of acts ('obligatory', 'right', 'duty', and so on) but keep in mind that this language can be reduced to aretaic language, or we can get rid of the deontic language altogether.[21]

Given the foregoing distinctions, we would classify NVE as a good-based ethical theory. NVE does not make the virtues *theoretically* fundamental, although for the purpose of evaluating individual human beings as good specimens of their kind the virtues are the marks for which we look. In NVE, then, the virtues are, in an important sense, *ethically* fundamental. It appears also that NVE is a moderate virtue ethics, for I am not claiming that no act can be ethically evaluated independent of considerations of the agent's character. Of course, we cannot evaluate a human being *qua* human being without considering her character, since an individual's character, that suite of traits that we may call virtues or vices, is as it were the currency of evaluation in such cases. However, NVE would allow us to evaluate some act without knowing anything about the human being who performed it.[22]

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[20] Hursthouse 1999, Foot 2001, MacIntyre 1999; cf. MacIntyre 1981.
[21] Statman 1997: 8-9.
[22] This understanding of virtue ethics may appear to leave us with a problem. It seems that we can bypass the virtues in making evaluative judgments and evaluate acts insofar as they contribute to the agent's species-specific ends. To avoid this problem, we need only show that the virtues are at least partially constitutive of our ends. See Hurka 1999; Oakley 1996 makes a similar point.

I would like to note also that the mere fact that I call the theory naturalized virtue ethics is not meant to beg any questions. There are other versions of virtue ethics that warrant being called naturalistic but that are dissimilar in important ways from NVE. For example, there are some other naturalistic virtue ethics that do not involve a theory of ethics.[23] And there are theories in which the *telos* of human beings is taken to be *eudaimonia* or happiness. I discuss this theory in the next section.

Finally, rather than using the terms synonymously, however, we may make a distinction between virtue *ethics* and virtue *theory*. Roger Crisp suggests: "Virtue theory is the area of enquiry concerned with the virtues in general; virtue ethics is narrower and prescriptive, and consists primarily in the advocacy of the virtues."[24] So, one may have a virtue theory without being a virtue ethicist. That is, one may have a theory of the virtues without advocating a thoroughgoing virtue approach to ethics. For example, Mill and Kant have theories of virtue, and more recently Julia Driver presents a consequentialist justification of the virtues.[25] Moreover, there are those like Bernard Williams, who advocates a virtue approach to evaluation but rejects the possibility of normative ethical theory.[26] Crisp's distinction has not become the norm for writers in philosophical ethics, however. Most philosophers, whether virtue ethicists or not, use the terms interchangeably.

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[23] Bernard Williams's view may be described as a naturalized virtue ethics, but although he advocates a virtue approach he does not provide a theory of ethics. In fact, he does not seem to think such a thing possible (Williams 1985). However, cf. Williams 2002, where he develops an ethical theory.
[24] Crisp 1996a: 5.
[25] Driver 2001.

And although it may sometimes be a useful distinction, I have tended to use them interchangeably. I should stress, however, that NVE is a virtue *ethics*, for the virtues are advocated, insofar as being a good human being *qua* human being is advocated. If I were asked, "Should I be a good human being?" I would answer, "Yes, of course, and that requires that one have certain traits of character." NVE is also a virtue *theory*, in that it is an attempt to explain why certain traits are virtues, that is, which traits are the ones the possession of which make one a good human being.[27]

5.1.2. Eudaimonism

Some may mistake NVE for a kind of eudaimonism. William Prior defines such a view as follows:

> Eudaimonism is the view that the fundamental intrinsic value in ethics is the human good. In particular, eudaimonism is the view

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[26] Williams 1985.

[27] Martha Nussbaum contends that virtue ethics is a misleading category (Nussbaum 1999). She argues that virtue ethics is not an alternative to utilitarianism and Kantianism, since the latter contain theories of virtue. As she sees it, the real difference amongst philosophers who are generally lumped together as "virtue ethicists" is the importance that they assign to reason. One group assigns great importance to reason. Nussbaum thinks it best to characterize the members of this group as anti-utilitarians. This group comprises Marcia Homiak, John McDowell, Iris Murdoch, Henry Richardson, Nancy Sherman, David Wiggins, and Nussbaum herself. Another group downplays the importance of reason. In this group Nussbaum includes Annette Baier, Simon Blackburn, Philippa Foot, Alasdair MacIntyre, and Bernard Williams (Nussbaum 1999: 169). The members of this group, as one might expect, Nussbaum calls anti-Kantians. She concludes "that it is not helpful to speak of 'virtue ethics.' " We should, rather, try to understand "the substantive views of each thinker" (Nussbaum 1999: 163). I agree with Nussbaum that we should try to understand the thought of each thinker. We certainly should not call anyone a 'virtue ethicist' and believe that we have thereby understood their ethics. I still think the term useful, for the sorts of reasons provided above. For another brief yet interesting piece on problems in classifying theories see Korsgaard 1996b: footnote 20, 232-234.

> taken in some attempts to justify ethical conduct in terms of its contribution to an agent's own good.[28]

Eudaimonism is a kind of good-based theory in which the ultimate good is *eudaimonia*.[29] Zagzebski calls such a theory a happiness-based virtue theory and cites Hursthouse's view as an example.[30]

We may conceive of a rather simple form of eudaimonism based upon a list theory of wellbeing.[31] In such a theory, what counts as a human being's *eudaimonia* can be expressed in a list of certain kinds of goods, e.g., health, achievement, social relationships, and pleasure. Those traits that tend to foster the having of the goods on the list we may call virtues. This simple picture shows us a clear case of a instrumentalist eudaimonism: there are goods that we should realize and the means to those goods themselves count as good *because* they are means to the goods. This view is both teleological and consequentialist. On a slightly more complicated picture, the virtues themselves would appear on the list of goods. This would make certain traits not only instrumental to *eudaimonia* but also constitutive of it. On this latter account, however, it becomes increasingly difficult to call the theory consequentialist.[32] Moreover, it may be the case that we will want to count as consequences only states of affairs or outcomes. It may be

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[28] Prior 2001: 325, italics removed; cf. Crisp and Slote 1997: 8.
[29] On one plausible understanding, we may call Mill's account of the virtues a happiness-based theory of the virtues, for his utilitarianism grounds the goodness of certain traits of character in the amount of happiness (utility) they tend to provide for the aggregate of those affected, a view Gary Watson calls character utilitarianism (Watson 1990). Cf. Mill 1861: ch. 4.
[30] Zagzebski 1996: 79.
[31] Hooker 1996.

said that *eudaimonia* is not strictly speaking a state of affairs or outcome; rather it is more of a process or activity. If we make that move, then strictly speaking this kind of eudaimonism is not a form of consequentialism. It is, nevertheless, a teleological theory. For there is a *telos*, namely *eudaimonia*, from which the virtues in some sense derive their goodness. Even if the virtues constitute *eudaimonia*, their goodness still derives from their connection to that ultimate good.

It would be a mistake to think that NVE is this kind of theory. This is not to say, however, that some proponents of theories like NVE are also eudaimonists. On Foot's view, it seems, '*eudaimonia*' turns out to be the name that we give to the *telos*, the set of ends of creatures like us, while Hursthouse claims explicitly that the goodness of the virtues derives from their relation to *eudaimonia*.[33] Hursthouse's explanation of the goodness of those traits we call virtues is actually twofold. The first part of her criterion of virtue states that the virtues make their possessor a good human being *qua* human being. The second states that the virtues enable their possessor to be *eudaimôn*, to live a happy, flourishing life. When Hursthouse speaks of the ends characteristic of human beings she speaks of them as ends. But when she discusses the claim that the virtues benefit their possessor, she quite naturally shifts to talking about *eudaimonia* as the end. This shift is easy for an Aristotelian to make. We find the same conflation in Aristotle.

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[32] But if that is so, then Mill's theory cannot count as consequentialism, for he sees having certain traits of character as possibly constitutive of happiness (Mill 1861: ch. 5). Again, we find a tension building in our taxonomy of ethical theories.

I cannot in good faith maintain, however, that the ends of our form of life, those ends set by nature, whatever those might turn out to be, are identical to that good or set of goods we call *eudaimonia*, wellbeing, or happiness. The ends of the human form of life include at least individual survival and continuance of the species, ends Hursthouse herself posits. Although the former would seem necessarily to be part of *eudaimonia*, and if not a part then a necessary precondition, there is no reason to believe absent some argument that the latter is part of *eudaimonia*. Moreover, it may turn out to be the case that *eudaimonia* is only one among several ends set by nature, ends towards which human beings naturally strive. It could be the case that a certain kind of psycho-physiological harmony is one of our ends, perhaps as a "characteristic enjoyment." Or it could be a necessary precondition, more or less, of an individual's consistently actualizing the other ends. These possibilities are certainly worth exploring. My point is simply that the ends set by nature for humans and our *eudaimonia* or happiness are not necessarily identical. This is one of the reasons for my refusal to classify NVE as a kind of eudaimonism.

A further reason to reject the classification of NVE as a kind of eudaimonism is the generality of NVE, which to me is a crucial and interesting mark of its rightful claim to being called naturalistic. If we follow Aristotle, only human beings are capable of *eudaimonia*. As he says:

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[33] Foot 2001: 44, 81-98; Hursthouse 1999: 9-10, 167, 259-260, 264-265; cf. Hursthouse 1991, 1996.

> It is not surprising ... that we regard neither ox nor horse nor any other kind of animal as happy [*eudaimôn*], since none of them can share in this sort of activity [rational or virtuous activity].[34]

On Aristotle's account, since animals are incapable of a life of virtue, because it necessarily involves reason, they are incapable of *eudaimonia*. If this is so, then there can be no eudaimonist theory of other living beings besides human beings, or other rational beings similarly situated. Some may call this a quibble. Fair enough, but it is a quibble about philosophical terminology, and without precise terminology we often will not understand our own thought. To say that other creatures cannot be *eudaimôn* is not to say that nonhuman living beings are not capable of their characteristic flourishing or that nothing counts as their wellbeing or welfare or doing well. But in keeping with my understanding of the tradition I believe it best to reserve usage of '*eudaimonia*' and its adjectival variants for human happiness, though saying what that is has not proven so simple. Thus, the expression 'human *eudaimonia*' will be redundant and 'nonhuman *eudaimonia*' oxymoronic, except for those yet undiscovered species (perhaps extraterrestrial) whose members might be similarly situated as we are. We can still talk about the "wellbeing" of nonhuman living things, though we shall not call it *eudaimonia*.

Before ending the discussion, I must say a bit more about terminology. Elizabeth Anscombe was probably the first to use the tem 'flourishing', and it has been adopted by many working in virtue ethics.[35] 'To flourish' originally meant

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[34] *NE* 1199b32. Also, at *NE* 1178b24ff Aristotle argues that nonhuman animals cannot be happy (*eudaimôn*) because they cannot engage in the life of study; presumably such a life for nonanimals would also be so precluded.
[35] Anscombe 1958; see Hurka 1999.

"to flower," and now may mean "to grow luxuriantly" and "to thrive." It may also mean "to achieve success" or "to prosper."[36] The notion of growth and development is operative here, but also doing so well. We may also take 'flourishing' here to mean achieving one's ends or goals. Many also use 'flourishing' as a noun, synonymous with, *inter alia*, 'welfare', 'wellbeing', 'living a/the good life', and '*eudaimonia*'. I think that the term should not be used to mean the same as '*eudaimonia*' for the reasons cited above. Plants may flourish, but they cannot be *eudaimôn*. Moreover, flourishing, in the sense of growing and developing well, is an end of all living beings. It is not, however, identical to the set of ends, nor should we use the word to mean that.

5.2. NVE and neo-Darwinism

5.2.1. Our place

NVE is, to an important extent, biological. It is biological not in a strict scientific sense, but in the sense that we appeal to the form of life of a species in grounding our norms about that species. It is thus *bio*-logical. It partakes essentially of the *logos* of life.

Human beings are a kind of animal that lives on a small planet in the corner of a medium-sized galaxy in the midst of a very large universe. Human beings live on this planet called Earth in various terrestrial environments. "Man" does not just have a place in nature: we are nature. Not only are we creatures susceptible to the vicissitudes of the environments in which we make our way, but

[36] *OED*.

we are also ourselves environments and parts of environments for other creatures. The continuity of human beings and nature is a fundamental assumption of naturalism.[37] The distinction between the "artificial" creations of humans and the "natural" creations of other plants and animals has its roots in a collective illusion under which almost all of us dwell, except perhaps when at our most reflective. This collective illusion is that humans are different from nature—and not just different in degree from the "lesser" animals, but different in *kind* in some way that, for lack of a better term, we might call metaphysical. That said, there is perhaps a basis of truth in many illusions. Human beings have some phenotypic traits that, as far as we know, are not shared by the other animals. One of our special traits allows us to reflect and to theorize.

The overwhelming majority of scientists who work in the relevant fields accept the following account, at least in broad outline. This is not to say that there are not details about which scientists can and do argue. There will always be room for further discovery of facts about human beings until our science and our philosophy are at an end.[38] The facts, as we know them, are provided by fossils, archeological finds (tools, etc.), and DNA of contemporary humans.[39] The theories, as we have them, are based on those data and are attempts to explain

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[37] See Chapter 1 of this work; cf. Romanell 1958.

[38] As of my writing this an important fossil find may significantly push back the supposed date for the divergence of the hominid line from the other primates, a divergence which eventually resulted in the evolution of *H. s. sapiens*. Another recent find further underscores the "bushiness" of the human family tree. Since the theory here is so greatly underdetermined by the data, it seems reasonable (absent some sort of divine revelation) that the *whole* story will never be known to us.

[39] Poirier and McKee 1999 is my source for information here, though any current textbook on evolutionary anthropology would do as well.

them. In the usual Linnaean taxonomic scheme, human beings are of the kingdom animalia, the phylum chordata, the class mammalia, the order primata, the family hominidae, the genus *Homo*, and the species *sapiens*. To differentiate modern humans from our more immediate ancestors, our subspecies is indicated by adding another 'sapiens' to the binomial nomenclature, making us *Homo sapiens sapiens*. Apparently, *H. s. sapiens* has been here for some time, at least by human historical standards. The oldest discovered evidence dates to approximately the Late Pleistocene of 120,000 years ago. Presumably, we got here—*here* in the sense of "this place and time" as well as *here* in the sense of "the way we are"—in more or less the very way in which all the other organisms did. We *evolved*. The 'we' here becomes a bit slippery, however, for as currently understood the evolutionary process is a very slow and gradual process.[40] It is then at least difficult and probably impossible to say when we became us. The breakdown of the language here calls attention to this difficulty. Importantly, we are related not only by common descent to the plants, animals, fungi, *et al.*, but also by common design. I use the term 'design' guardedly, mainly because I do not want to beg any questions as to the source of the teleology that living things exemplify. However, our best naturalistic explanation of the diversity and functionality of living things is provided by Darwin's theory of natural selection.

Modern evolutionary theory provides us with the framework for understanding natural teleology. The neo-Darwinian theory of evolution by

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[40] Even if we accept some version of "punctuated equilibrium" theory, we are still talking about geologic time frames: hundreds of thousands to millions of years.

natural selection is the best scientific account we have of the origins of functional complexity and biodiversity in living things.[41] Natural selection is the major force in evolution and, as far as we know, the only force than can account for adaptation. Basically, all that is needed for the process of natural selection to take place is for there to be genetic variation in a population, variation that leads to differential reproduction of the variants. It is that simple. Crucial to evolution by natural selection, and hence the evolution of sophisticated goal-directed living systems, is this notion of differential reproduction of genotypes. Even though survival is also important to an extent, it is really survival in the service of reproduction that really counts. That is why summing up Darwin's theory as "survival of the fittest" is misleading, and not just because the phase seems tautological.[42]

A question then is how a naturalistic ethical theory like NVE fits in with the neo-Darwinian theory. In the next section I consider some possible relations. First, in §5.2.2 I examine and answer in the negative the question whether NVE ought to be considered a kind of evolutionary ethics. In §§5.2.3 and 5.2.4 I look at two sorts of objections based on considerations inspired by evolutionary biology that might be leveled at NVE. I show that these are no real objections.

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[41] It *may* be false, of course, and a true naturalist will admit as much. But for now it is our best explanation. Moreover, it may not be *true* and still be a good scientific theory. If that is the case, we can accept it without believing in it. This is a view advocated by van Fraassen 2002.

[42] The expression 'survival of the fittest', which originated not with Darwin but with Herbert Spencer, is in effect a kind of tautology. However, the theory of evolution by

5.2.2. Evolutionary ethics

Given the explanatory power and success of neo-Darwinian theory, we might think that evolutionary biology could contribute significantly to our understanding of ethics. There are at least three possible contributions that evolutionary biology might make.[43] First, it could play a descriptive or explanatory role. For example, facts and theories of evolutionary biology might help us to explain why human beings make the kinds of ethical judgments that they do.[44] Second, it could help us to answer important metaethical questions. For example, considerations of evolutionary biology might tell us whether ethics has an objective foundation.[45] Finally, it could settle important normative questions, or even be the source of norms. That is, evolutionary biology might tell us, for example, what sort of human being one ought to be. It is the last, normative sort of view that is generally meant by 'evolutionary ethics'.[46] This project may involve first giving an account of goodness that has some sort of essential reference to the

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natural selection is not. See Mills and Beatty 1979 for an influential and nontautological account of biological fitness.

[43] Philip Kitcher presents a similar taxonomy but that also includes a fourth possible contribution of evolutionary biology to ethics, that evolutionary biology can teach us facts about human beings that in conjunction with accepted moral principles can be used to derive norms not appreciated previously (Kitcher 1985: 417-418). Although worth thinking about, this does not seem to be a special contribution that evolutionary biology could make to philosophical ethics that would warrant calling the results an evolutionary ethics.

[44] See, e.g., Wilson 1978, Cosmides 1989, Cosmides and Tooby 1992.

[45] Cf. Ruse 1986, 1991.

[46] For more on the possible contributions of evolutionary biology to our understanding of ethics, pro and con, see, e.g., Darwin 1874, Huxley 1893, Ruse 1986 and 1991, Bowler 1989, Gewirth 1993, Farber 1994, Ayala 1995, Rottschaefer 1997, Petrinovich 1998, Lemos 1999 and 2001, Richards 1999, van der Steen 1999, Woolcock 1999.

findings and theories of evolutionary biology, for example, that biological fitness is good or *the* good. The evolutionary ethicist must then explain why human beings ought to be good, somehow in evolutionary, neo-Darwinian terms, perhaps in terms of what human beings naturally desire. This popular way of understanding evolutionary ethics should demonstrate the structural similarities to NVE. This sort of evolutionary ethics is obviously a teleological theory. An evolutionary ethicist would understand genetic proliferation, or biological fitness, as the *telos*. My primary criticism of normative evolutionary ethical theories, and where they tend to diverge from NVE most importantly, is that they too narrowly circumscribe the *telos* of humans beings.

A proper understanding of biological evolution is required for a proper understanding of human nature. It follows that a proper understanding of evolution is necessary for a proper understanding of NVE, since NVE depends on there being a naturalistic account of human nature. However, I do not think, unlike the "narrow" evolutionary ethicist just sketched, that understanding how we got to be the way we are and why has *everything* to do with understanding our nature. Although individual survival and continuance of the species are natural ends of creatures like us, they are not the only ends. Thus, despite structural similarities, NVE should not be confused with evolutionary ethics.

Returning to the tripartite taxonomy of possible contributions of evolutionary biology to ethics sketched above, I think that evolutionary biology can shed light on the scientific question of why we think that a human being with certain traits is a good human being. That is, evolutionary biology might be able to

tell us why NVE is the logic of our evaluations. Evolutionary biology may also be the key to metaethics, though about such questions I am less sure. Nonetheless, it could be the case that, even though there are many proximate ends, there is in fact only one ultimate end, which is, in Dawkins's term, "total genetic proliferation."[47] The ultimate end may be that vanishing point where the normative and the descriptive collapse into each other, about which nothing further can be said as far as evaluation is concerned. Even given the possibility that biological fitness is, alas, the final end, I will not concede that NVE is an evolutionary ethics of the prescriptive sort. Biological fitness, like *eudaimonia*, is one of the possible ends of creatures like us, but not the only by which we will be evaluated in NVE.

5.2.4. Happiness and optimality

Some hold that neo-Darwinism raises insurmountable challenges to theories like NVE. Bernard Williams, for example, argues that considerations inspired by neo-Darwinism pose significant problems for or are at least "largely discouraging" to such projects. The first reason is "at the more particular and factual level":

> "[T]he most plausible stories now available about [human] evolution, including its very recent date and also certain considerations about the physical characteristics of the species, suggests that human beings are to some degree a mess, and that the rapid and immense development of symbolic and cultural capacities has left humans as beings for which no form of life is likely to prove entirely satisfactory, either individually or socially."[48]

[47] Dawkins 1976.
[48] Williams 1995b: 109.

Evolutionary biology implies that humans are an evolved "mess" for whom no life will be "satisfactory." Williams provides three considerations in support of this claim. First, there is the recent date of our evolution. Second, there are certain considerations about our physical characteristics. Finally, there is the speed and greatness of our symbolic and cultural development. Let us examine the possible evidence for these claims and whether if true they could pose a threat to NVE.

Although he cites none of the evolutionary biology literature to support the idea that the recent date of our evolution makes us a mess and incapable of a satisfactory life, Williams may be understood as appealing to a claim made by some evolutionary psychologists, which amounts roughly to the following. *Homo sapiens* spent most of their evolutionary history in a hunter-gatherer type environment, so they are best adapted to environments similar to those. However, we have reshaped our environment so quickly that we have not had enough time to sufficiently adapt to the new conditions. "Our modern skulls house a Stone Age mind," is a saying often invoked.[49] So, we are ill-fitted for modern life. The development of language and other means of non-genetic learning would perhaps further the difficulties, as would the development of various technologies and different ways of living together.

What about the physical characteristics of human beings, from an evolutionary perspective, that would render our lives less than "satisfactory"? The

[49] "The environment that humans—and, therefore, human *minds*—evolved in was very different from our modern environment. Our ancestors spent well over 99% of our species' evolutionary history living in hunter-gatherer societies" (Cosmides and Tooby, no date). Cf. the introduction and essays in Barkow *et al.* 1992.

primary process by which evolution occurs is by means of natural selection of variants in a population. Initially such variants come to be present due to more or less random processes, usually genetic drift and random mutation, and more determinate ones like the crossing over of chromosomes during reproduction. Natural selection is a nonrandom process acting on the above randomness, and is the only known mechanism by which complex functionality of some sort can come to characterize a species. It is well to think of natural selection not as an "optimizer" but, in Francois Jacob's apt phrase, as a "tinkerer."[50] It works with what it has, but never looks ahead. Moreover, there are always more or less chance events that happen, events which could wipe out the "fittest" and leave standing those "less fit" in the population to carry on the species. Given that this is the way evolution works, it may be fitting to call humans, as Williams does in another essay, "an ill-assorted *bricolage* of powers and instincts."[51] And there are other reasons to think this. For example, there is what is called gene linkage, where some phenotypic traits "tag along" with others simply because of the closeness on the chromosomes of the genes that cause the traits. One of the traits in such a pair may be very good for survival and reproduction, whereas the other may be neutral or even bad in some way. Yet the neutral or bad trait persists in the population, as long as the "badness" of the trait does not reduce an organism's fitness too much, that is, more than the compensating gain from the good trait. There is also pleiotropy, where a gene causes more than one trait, one of which

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[50] Jacob 1977.
[51] Williams 1995a, cited in Hursthouse 1999: 256.

may enhance fitness, while the other is neutral or has negative fitness consequences.[52] So, there is some evidence that humans might be cobbled together and also have inherent conflicts built into their nature.

Is there a response to this charge? We could begin by asking what is meant by a "satisfactory" life. We could have a subjective or an objective reading of 'satisfactory'. One way to understand the claim that no life will ever prove satisfactory is that we have no chance, individually or socially, of being happy. This is, of course, not a problem for NVE, since the theory makes no assumptions about the possibility of human happiness. But the claim may be that optimality is impossible for creatures like us, because of how we evolved. If NVE is understood as requiring a sort of optimality and optimality is impossible for us, then NVE has a problem. Yet NVE does not require optimality. But on another sort of objective reading of 'satisfactory', there may be a problem for NVE. We may take the claim that no one can have a satisfactory life to mean that, because of how we evolved, no human being can be a good specimen of the kind. However, that claim sounds close to ludicrous.

Many evolutionary psychologists make the Stone Age mind claim, but it can be questioned whether the claim is justified. There was a long history of evolution *before* we got to the hunter-gatherer stage. There is also some evidence that we have evolved *since* the Pleistocene era.[53] The Stone Age mind hypothesis

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[52] See, e.g., Futuyma 1998.

[53] For example, there is evidence of a relatively recent evolution of lactose tolerance (Feldman and Cavalli-Sforza 1989) and of different "racial" characteristics (Nitecki and Nitecki 1994).

is to some a dogma, to some a shibboleth. Some seem to understand the claim as a *de facto* methodological assumption that *a priori* suggests certain kinds of hypotheses and rules out others. The claim itself is not tested directly, nor can it be. However, it is, in effect, an empirical question just how much of our present brains and nervous systems are Stone Age and also what difference it makes in the current environment of, say, Manhattan, Sioux City, Baghdad, or Nairobi. A more general way to understand the claim is as a consequence of the claim that there is a sort of "time lag" in evolution. Roughly, species are always adapted to the environment that came before the current one. This poses no problem if environments remain stable for long periods of time, so that the species can catch up, so to speak. However, if the environment changes dramatically, then a whole species may be maladapted.

There may be good reason to think that *Homo sapiens'* particular version of the time lag is very important for us. Our Stone Age mind encounters many strange adaptive challenges that its forbears did not. And given how evolution works, we may have sufficient warrant for describing humans as "an ill-assorted *bricolage* of powers and instincts." And we certainly are subject to constraints. For example, our spines are notoriously ill-suited for upright posture. And there are no doubt pleiotropic and other genetic effects that might render us suboptimal. That is the human condition. But it is no more true of us than of any other species that has evolved on the planet. Certainly, given our relative complexity and our capacities for rational deliberation and imagination, there may be more ways for us to go wrong. Surely no other species besides us has yet been on the brink of

nuclear holocaust. However, it does not follow from the fact that all living things evolved through certain processes or have certain historical and mechanical constraints that there is no characteristic way for animals and plants to go on, that is, that there is no form of life for different species. In fact, those characteristic ways of going on are the *data* of much of biological science, phenomena that evolutionary biology can help to explain.[54] And we can, once we have identified the ends of a species and its ways, evaluate a member of that species.

5.2.4. Teleology revisited

Williams notes a second, "more general" reason for teleological ethical naturalists to be discouraged by Darwinism:

> The idea of a naturalistic ethics was born of a deeply teleological outlook, and its best expression, in many ways, is still to be found in Aristotle's philosophy, a philosophy according to which there is inherent in each natural kind of thing an appropriate way for things of that kind to behave.... [T]he first and hardest lesson of Darwinism, that there is no such teleology at all, and that there is no orchestral score provided from anywhere according to which human beings have a special part to play, still has to find its way fully into ethical thought.[55]

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[54] Hursthouse provides her own objection to Williams's view. She writes: "The belief that harmony *is* possible for human beings, that we have the virtues neither by nor contrary to nature, but are fitted by (our) nature to receive them, is, I think, an essential part of the ethical outlook even of the minimally virtuous—any of us who think that being right about ethics matters" (Hursthouse 1999: 262). To understand Hursthouse's objection to Williams's view (conceived of as moral nihilism), we must understand a crucial component of her conception of a naturalistic approach to ethics. She assumes without argument that we cannot understand morality from a neutral point of view and that we always begin our ethical inquiries from within an acquired ethical outlook (Hursthouse 1999: 164ff., especially 164-167). As the above shows I have followed a different tact in addressing the concerns raised by Williams.
[55] Williams 1995b: 109-110.

If we have evolved by Darwinian natural selection, then we have no essential nature. This is the case because neo-Darwinism rules out teleology and essentialism requires teleology. But neo-Aristotelian ethics requires a certain kind of essentialism. Thus, one cannot be a neo-Darwinian and a neo-Aristotelian.[56]

A danger exists here for NVE only if one misunderstands neo-Darwinism and neo-Aristotelian ethical theory. Darwinism may actually be seen as underwriting teleological explanations in biology, that is, as playing a crucial theoretical role in explaining certain kinds of telic phenomena. In other words, Darwinism can explain how a species gets a trait that has a particular *function*. The mechanism of natural selection is differential selection of more favorable, randomly generated variants, in respect to certain determinate environmental factors. This mechanism can explain—with reference only to efficient causes—how it has come to be that certain kinds of things, for example, living organisms, come to exhibit telic phenomena.[57] The first and hardest lesson of Darwinism is not that there is no global teleology. Scientists had already begun getting rid of that notion long before Darwin developed his theory. The task Darwin set himself was to develop a theory that could explain diversity ("the origin of species") and functionality (adaptations) in living organisms without recourse to global teleology. And that is what he did. Global teleology was, of course, an alternative hypothesis to be considered. But the fact that such an hypothesis is empirically

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[56] Cf. MacIntyre 1981.

[57] We may want to be more cautious here and say that the Darwin's proposed mechanism has always held out the *promise* of explaining how living things have come to exhibit telic phenomena.

untestable and in most forms requires supernatural processes in order to operate made it suspect as a *scientific* theory long before Darwin. But one of Darwin's major accomplishments was to provide a theoretical explanation of "local" telic phenomena without recourse to any sort of global teleology. If Darwinism has something to teach us about teleology, it is not that there is no such thing. It is that such a thing can be given a naturalistic explanation.[58]

NVE does not commit one to there being an "orchestral score" according to which we should play our "special part." Such a characterization of teleological ethics is a caricature. I assume, along with many other people—and I do not think this is really a tendentious assumption—that there are many paths I could take in this life, many possible lives I could actualize. Some of those lives I would rather live than others. Objectively speaking, some lives just are better than others. NVE maintains that the facts concerning which lives are good ones and which ones are not is a matter of how those lives square with what human nature is. My own nature is a more or less direct product of my history, both the evolutionary and cultural history of humanity and the history of the life I have lived so far. Not just any life will prove satisfactory; not just any life will exemplify that representative of a good human being. This is because of the way I am. But this does not imply some sort of orchestral score I have to follow in order to be a good human being.

Human nature is a set of adaptations shared by all races and ethnic groups. It is an important prediction of evolutionary theory that humans will show universal characteristics that exist cross-culturally. This is because all humans are

[58] See, e.g., Mayr 1992, Fitzpatrick 2000, and Ruse 2002.

closely related genetically and because our ancestors faced the same adaptive problems. Evolved strategies should be common therefore to all peoples. For example, as Chomsky first pointed out, children do not have to be taught grammar.[59] The "deep structure" of language is innate. However, languages can vary radically in their "surface structure." Here is a place we see cultural variation. From an evolutionary point of view, in fact, we would *expect* to see cultural variation. This is where those who argue "nature vs. nurture" go sadly wrong. From the gene's point of view, culture is just more environment and thus provides different adaptive problems to solve. We might expect some "epiphenomenal" cultural variation, variation more or less neutral in respect of fitness. But we should also expect some cultural variations to reflect selection pressures and only vary within a range. For example, we see examples of monogamous mating systems and polygynous ones. We would not expect, however, to see mating systems of polyandry. And indeed we do not find them.

Consider food and nutrition. Because of the kind of animals that we are, there are some foods that are good for us and some that are not. To be a good specimen human being, one needs to meet certain minimal nutritional requirements. Humans who do not do so usually end up leading less that desirable lives. But from the fact that humans must eat the right kinds of foods in order to be healthy, it does not follow that there is one kind of diet that all must follow. There are a near endless variety of good foods we can eat. There is room for improvisation in one's diet. However, if that diet is to be a healthful diet, it must

[59] Chomsky 1957.

be constrained by certain facts about human nature, that is, that individuals of our species require certain kinds of nutrients. But there is no diet that all of us must adhere to in order to be healthy.

A better analogy than an orchestral score, then, might be with improvisatory jazz. There is a melody, of course. Yet some deviation from the melody is permitted, even desired—within reason. There is a structure to the song, but all the notes and rhythms are not transcribed in advance. Of course, if there is too much deviation from the score, the melody may begin to suffer, the song become unrecognizable to the performers and the audience, in which case it may be necessary for the other musicians to try to rein in the one who has pushed the limits too far. But this is not to say that there is no teleology to the song being played, although the *telos* is not the last note. There is a characteristic way of going on when the band plays "Melancholy Baby," though within that way of going on the space for improvisation is great. Even though human beings are evolved animals, it is not the case that there is no human nature. There is. But that nature is sufficiently plastic to allow for much variation in the species and choices of ways to be.

5.3. What remains

NVE is a naturalistic ethical theory that grounds ethics in considerations of human nature. It is rightly called a virtue theory because the locus of evaluation is the individual human being and its traits. NVE is unobjectionably teleological and does not have any devastating metaethical problems. Still, as it stands the theory is

incomplete. There is much work to be done, though it is hoped that the foundation laid here will be sound enough to withstand the necessary additions and, perhaps, modifications. There are at least three sets of mostly philosophical questions that need further exploration in light of NVE, as well as a set of empirical questions that, when answered, will allow us to further understand what makes a human being good.

One project that must be undertaken is an examination of the virtues individually to show how they fit, or do not fit, with NVE. In chapter 3 I showed briefly how this would be done with courage, honesty, and loyalty, and in more detail with justice. However, much more work needs to be done to flesh out the treatment given, as well as to deal with those potential virtues not considered. Another promising avenue of research would involve an examination of those traits thought to be virtues by Aristotle, for example, proper pride, and how we square his intuitions about those traits with our current intuitions about others, for example, humility. Also, an exploration of vice from the NVE perspective could shed much light on why certain individuals and types are bad, or not so good, people.

Another project to undertake would be to develop a full-blown theory of justice by the lights of NVE. I began laying the groundwork for this theory in §§3.3.1-3.3.3. There I presented a neo-Humean consequentialist theory, which seems to me the best fit with NVE. This is the case because NVE tells us what makes up the human good and the good human. If we adopt a consequentialist view of politics and law, the question of justice for NVE then becomes the

question of how we are to promote, maximize, encourage, or otherwise realize both the human good for individuals and a society of good humans. I understand, of course, that there are other, nonconsequentialist perspectives on legal and distributive justice. It would be interesting to see whether NVE is compatible with some deontological theory, for example Nozick's or Rawls's, or with game theoretic accounts of justice, or whether there is available a plausible virtue theoretic account of distributive and legal justice.

A final set of mostly philosophical questions surrounds the issue of ethical motivation, or the "normativity" of ethics. I noted my awareness of these issues above in §4.1, then dismissed them as not currently being my problem. That said, these issues still are a problem for NVE and for ethical philosophy more generally. I also noted that others have dealt with these issues, admirably and at length.[60] What these others have not done, at least to my satisfaction, is integrate their findings into a theory like NVE. Furthermore, not enough of what we now know about our social and psychological nature has been integrated into our philosophical understanding of ethical motivation. Thus, to be thorough, more interdisciplinary work is needed.

For NVE to be sound, and for us using it to be able to draw reasonable ethical judgments about individuals and types of individuals, we must begin with true propositions about human nature. Certainly, reflection and introspection, personal and shared experiences, and the arts provide other, nonscientific ways to

[60] See references above, p. 107n5.

arrive at the truth about human nature. But, generally speaking, anecdotal evidence is not a reliable way to derive inductive generalizations.

The philosophical questions facing us are difficult. The empirical questions are also difficult, though many of them have been answered. It is interesting and instructive to consider how changes in our concept of human nature, changes in perspective motivated by findings in the sciences, affect our ethical assessments of human beings. In considering the case below it would be presumptuous of me to contend that NVE was the operative ethical theory. However, a possible rational reconstruction of our thought shows that NVE *could have been* the operative theory that, along with the relevant scientific facts, caused us to change our collective minds, as it were, about what constitutes a good human being.

In the 1950s it was the conventional wisdom of psychologists, under the sway of Freud and the behaviorists, that human infants were attracted to their mothers only as a source of milk and that too much affection would harm them. Groundbreaking and controversial research by Harry Harlow effectively demonstrated that mothers were much more than merely a source of nourishment. Social beings like ourselves cannot long survive isolation and remain functionally intact.[61] Once Harlow's findings had been accepted, the conventional wisdom about how infants should be treated dramatically changed. Empirical research demonstrated what is necessary to nurture well-functioning human beings, and consequently our concept of a good mother changed as well.

Having some idea of what makes a good mother enables us to give sound advice to mothers and other infant care-givers. The natural end of a good mother is to raise good offspring. Without Harlow's research we would not know what constitutes a good mother. Continued empirical research and integration should help us to apply NVE to many other cases. As Aristotle, Spinoza, Hume, and various others realized, ethical philosophy must begin with a proper understanding of human nature. Empirical research is the foundation of this understanding. We have learned much, though it often seems as if we have only scratched the surface. Thus, much work remains, but a basic faith in humanity, belief in the intrinsic value of nature, and hope that we can make the world a better place are enough to persuade me that this work is worth doing.

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[61] Cf. Blum 2002 for a journalist's account of Harlow's life and work. Paradoxically, perhaps, Harlow's research on rhesus monkeys demonstrated that such research is itself unethical.

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