

HOMOSEXUAL POETS AND SUCCESSFUL GANGSTERS: AN EXAMINATION OF
ARISTOTELIAN NATURALISM, AND THE SKEPTICAL WORRIES CONFRONTING IT

By

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To my friends everywhere

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TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS.....	4
ABSTRACT.....	8
CHAPTER	
1 INTRODUCTION: AN ARISTOTELIAN DILEMMA	10
Introduction	10
Overview.....	11
Skeptical Worries about Aristotelian Naturalism.....	14
Aristotelian Naturalism in the Face of These Worries.....	15
Chapters 2 to 5: How Aristotelian Naturalism Based on a Functional Account of Goodness Can Answer the First Skeptical Worry	16
Chapters 6 and 7: A Dilemma for the Aristotelian Naturalist	19
Conclusion	21
2 GOODNESS VS. <i>GOODNESS</i> AS AN ANALYSIS OF “GOOD” AND THE ROLE IT PLAYS IN FOOT’S ARISTOTELIAN PROJECT	22
Introduction	22
What Makes Foot’s Project an Aristotelian One?.....	24
Why Goodness on Foot’s View Cannot be a Monadic Property	31
Goodness as Foot’s Natural Relational Account of Goodness.....	34
Conclusion	40
3 NATURAL GOODNESS: FOOT’S NATURAL RELATIONAL VIEW OF GOODNESS APPLIED TO NONHUMAN LIVING ORGANISMS	42
Introduction	42
The Story of Goodness Thus Far.....	43
Natural Goodness in Nonhuman Living Organisms	45
A Metaphysical Issue Surrounding Natural Goodness	47
An Examination of ACs as Expressing Naturalistic Criteria for Goodness in Nonhuman Living Organisms	48
Difficulties with Thompson’s ACs	52
Conclusion	58
4 CAN THE WORKS OF FIELD BIOLOGISTS PROVIDE NATURALISTIC CRITERIA FOR GOODNESS IN LIVING ORGANISMS?	60
Introduction	60
The Importance of Naturalistic Criteria of Goodness to Foot’s Account.....	62

	What Makes an Aristotelian Account of Living Organisms Aristotelian? Back to Aristotle.....	63
	ACs Reconsidered: Can ACs be Plausibly Based on the Perspective of Field Biology?	67
	Conclusion	75
5	A FUNCTIONAL ACCOUNT OF FOOT’S VIEW OF GOODNESS IN LIVING ORGANISMS.....	76
	Introduction	76
	Why Formulate a Functional Account of Foot’s View?	78
	A Functional Account of Foot’s View of Goodness, Applied to Inanimate Objects.....	78
	A Functional Account of Foot’s View of Goodness in Living Organisms, Based on Field Biology	88
	Fitzpatrick’s Evolutionary Functional Account	103
	Fitzpatrick’s Functional Account, Applied to Inanimate Objects	107
	Fitzpatrick’s Functional Account, Applied to Living Organisms	110
	Two Distinct Functional Accounts: Why Evolutionary Biology Does Not Undermine the Field Biological Functional Account of Foot’s View of Living Organisms	113
	Implications of My Field Biological Functional Account	116
	Conclusion	118
6	GOODNESS IN HUMAN ACTIONS AND LIVES: AN EXAMINATION OF HURSTHOUSE’S ACCOUNT.....	121
	Introduction	121
	Overview of the Chapter.....	122
	Foot on There Being a Common Evaluative Structure Governing Plants, Animals, and Moral Evaluations of Human Actions and Lives	123
	Hursthouse’s Account.....	128
	Human Beings as Rational Social Animals.....	132
	How is the Virtuous Exercise of Rationality the Characteristically Human Way of Exercising Rationality?	135
	Why a Functional Account of Goodness in Human Actions and Lives Cannot Plausibly Be Articulated.....	143
	Does Hursthouse’s Account Succeed in Giving the Gangster Reason to Live in Accordance with the Virtues?.....	146
	Does Hursthouse’s Account Need to Validate the Virtues Independently of Any Particular Ethical View?	151
	How does Aristotelian Naturalism Fare in The Face Of the Three Skeptical Worries?.....	153
	Conclusion	156
7	HOMOSEXUAL POETS, OSTENSIBLY-FLOURISHING CELIBATES AND SUCCESSFUL GANGSTERS: AN ARISTOTELIAN DILEMMA	158
	Introduction	158
	SNAN in the Face of the Second and Third Skeptical Worries	160

The Second Skeptical Worry, and the Fundamental Difficulties about SNAN That It Expresses.....	161
Why Practicing Homosexuals are Defective Human Beings on SNAN	175
The Third Skeptical Worry, and the Difficulties in SNAN That It Reveals	179
Can the Proponent of SNAN Plausibly Argue That the End of the Continuance of the Species is Not Central to Human Flourishing?	184
Does the Successful Gangster Have a Reason to Be Virtuous?	186
Conclusion	187
BIBLIOGRAPHY.....	192
BIOGRAPHICAL SKETCH	194

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The work of this dissertation is motivated by the recent revival of interest in virtue ethics in moral philosophy. Specifically, I examine the plausibility of recent Aristotelian naturalistic views of goodness put forward by Philippa Foot and Rosalind Hursthouse. Overall, I argue that the prospects for this kind of Aristotelian naturalistic project are not very optimistic. I argue that although Aristotelian naturalism can be successfully defended against recent challenges from evolutionary theory, thus giving it some measure of credibility, the Aristotelian naturalist is ultimately confronted with a dilemma. On the one hand, if she stays true to the central aim of Aristotelian naturalism, and attempts to put forth a naturalistic account of human flourishing that is explicable in terms of contemporary biology, she would have an account that furnishes similarly structured naturalistic truth conditions for both moral evaluations of human actions and lives, and non-moral evaluations of plants and animals. Such an account, however, supports implausible moral judgments about virtue and flourishing. On the other hand, if she were to incorporate avowedly normative criteria for moral judgments into her account, she would have an account that supports a *prima facie* more plausible moral theory. However, insofar as such avowedly normative criteria do not admit of naturalistic explication, such an account would lack

a naturalistic foundation. There does not seem to be any ready solution to this dilemma. In light of this, Aristotelian naturalism cannot be shown to be plausible as a view of the nature of goodness or as a foundation for virtue theory.

CHAPTER 1
INTRODUCTION: AN ARISTOTELIAN DILEMMA

Introduction

The work of this dissertation is motivated by the recent revival of interest in virtue ethics in moral philosophy. Specifically, I examine the plausibility of recent Aristotelian naturalistic views of goodness put forward by Philippa Foot and Rosalind Hursthouse. It is with this aim in mind that I devote a large part of this dissertation to formulating a functional Aristotelian account of goodness based on their recent works. My purpose in formulating such an account is to utilize this account to assess whether and to what extent Aristotelian naturalism can be defended against recent criticisms.

Overall, my prognosis for this kind of Aristotelian naturalistic project is not very optimistic. I argue that although it is possible to defend Aristotelian naturalism against recent challenges from evolutionary theory, thus giving it some measure of credibility, the Aristotelian naturalist is ultimately confronted with a dilemma. On the one hand, if she stays true to the central aim of Aristotelian naturalism, and attempts to put forth a naturalistic account of human flourishing that is explicable in terms of contemporary biology, she would have an account that furnishes similarly structured naturalistic truth conditions for both moral evaluations of human actions and lives, and non-moral evaluations of plants and animals. Such an account, however, supports implausible moral judgments about virtue and flourishing. On the other hand, if she were to incorporate avowedly normative criteria for moral judgments into her account, she would have an account that supports a *prima facie* more plausible moral theory. However, insofar as such avowedly normative criteria do not admit of naturalistic explication, such an account would lack a naturalistic foundation. There does not seem to be any ready solution to this dilemma. In

light of this, Aristotelian naturalism cannot be shown to be plausible as a view of the nature of goodness or as a foundation for virtue theory.

Overview

In her seminal paper, ‘Modern Moral Philosophy’, Elizabeth Anscombe suggests that “just as *man* has so many teeth... so perhaps the species *man*, regarded not just biologically, but from the point of view of the activity of thought and choice in regard to the various departments of life... ‘has’ such-and-such virtues.”¹ This suggestion, and Anscombe’s paper as a whole, has been highly instrumental both in the revival of virtue ethics in the latter half of the twentieth century, and in influencing the direction of more recent work undertaken in this area. In particular, the movement that is commonly referred to as Aristotelian naturalism sets out to develop this suggestion into a fully fledged naturalistic account of goodness, one that can underwrite both non-moral judgments of goodness in plants and animals, and moral judgments of goodness in human actions and lives.

Proponents of this movement, whose prominent members include Philippa Foot and Rosalind Hursthouse,² claim that moral evaluations of human actions and lives and non-moral evaluations of parts, features and activities in plants and animals share a “common structure of evaluation.”³ Both Foot and Hursthouse claim that common criteria of goodness apply to both kinds of judgments, so that when we judge that a particular part, feature or activity in a nonhuman organism is good for that organism’s physical flourishing, we are really making the same kind of judgment as when we judge that a particular moral action or choice is good for

¹ Elizabeth Anscombe, ‘Modern Moral Philosophy’, in her *The Collected Philosophical Papers of G.E.M. Anscombe, Volume Three: Ethics, Religion and Politics* (Minneapolis: University of Minnesota Press, 1981), 38.

² See Rosalind Hursthouse, *On Virtue Ethics* (Oxford: Oxford University Press, 1999).

³ Philippa Foot, *Natural Goodness* (Oxford: Clarendon Press, 2001), 40.

human flourishing. This being the case, they claim, it is possible to articulate similarly structured naturalistic truth conditions both for non-moral evaluative judgments about nonhuman organisms and for moral judgments about human actions and lives. Accordingly, we can come to better understand what is involved in making moral evaluations of goodness in human actions and lives by first getting clear about what is involved in making non-moral evaluations of goodness in the cases of plants and animals.

Although she does not go on to spell out how such an idea is to be developed, Foot proposes in several places in her work that such an evaluative structure is to be understood in functional terms. For instance, she claims:

The question is... whether characteristics of humans can be evaluated in relation to the part they play in human life... In favour of this there is the fact that a certain network of interrelated concepts such as *function* and *purpose* is found where there is evaluation of all kinds of living things, including human beings.⁴

The basic idea behind her claim is that we might say, for instance, that deep and sturdy oak roots are functioning well or fulfilling their “proper” function within the organism by contributing to the physical flourishing of the oak.⁵ In a similar vein, we might also, in a moral context, say that human actions that accord with virtue fulfill “proper” functions within a human life by contributing to the flourishing of the human agent within a human community.

Motivated by Foot’s proposal, a large part of this dissertation (chapters 2 to 5) is devoted to constructing a functional Aristotelian account of goodness, one that is or appears to be consistent with the views of both Foot and Hursthouse. By putting forth such an account, I show that it is plausible to understand particular parts, features and activities in nonhuman living organisms to be fulfilling their proper functions within the organism when they operate in such a

⁴ Ibid., 40.

⁵ Foot brings up this particular example at Ibid., 46.

way as to contribute to the physical flourishing of the organism. Such a functional account can also be employed to defend Foot's views against recent challenges from evolutionary considerations, thus imparting some measure of credibility to Aristotelian naturalism.

However, I argue, there are limits to what such a functional account can do for Aristotelian naturalism. As I shall show in chapters 6 and 7, if one were to apply functional criteria of goodness for plants and animals to moral evaluations of human actions and lives, one would end up with a moral theory that supports moral judgments that conflict with our moral convictions about virtue and flourishing. For instance, I argue, such a theory would fail to show that being a gangster is incompatible with being a good human being.⁶ This being the case, I argue, we shall accordingly have little reason to live in accordance with the judgments of such a theory.

Indeed, both Foot and Hursthouse recognize this problem. Hursthouse, in particular, incorporates an avowedly normative notion into her account of goodness in human actions and lives and, in so doing, arrives at a moral theory that is *prima facie* more plausible. Such a move, however, can only be made at a certain price. As I shall argue in chapter 6, insofar as such an avowedly normative notion does not admit of naturalistic explication, the incorporation of such a notion compromises a central aim of Aristotelian naturalism, that of understanding what is involved in making moral evaluations of goodness in human actions and lives by first getting clear about what is involved in making non-moral evaluations of goodness in the cases of plants and animals. If moral evaluations of human actions and lives are governed by avowedly normative criteria that do not admit of naturalistic explication, criteria of goodness in human actions and lives are then fundamentally different from criteria of goodness in plants and

⁶ The question of whether Aristotelian naturalism can show that being a gangster is incompatible with being a good human being is raised by Gary Watson in his paper, 'On the Primacy of Character', in Owen Flanagan and Amelie Oksenberg Rorty (eds.), *Identity, Character, and Morality: Essays in Moral Psychology* (Cambridge: The MIT Press, 1990), 463.

animals, and we cannot reasonably hope to gain any normatively significant understanding of the former by getting a clearer understanding of the latter.

Skeptical Worries about Aristotelian Naturalism

The ambitious aims of Aristotelian naturalism have met with skeptical worries in recent years.⁷ In this dissertation, I use these worries as the backdrop against which to illustrate and advance my prognosis about the prospects of Aristotelian naturalism. These worries can be broadly resolved into three overarching worries. The first worry is whether a determinate Aristotelian account can be given of the truth conditions of evaluative judgments, both moral and non-moral. How is one to go about identifying a *prima facie* plausible set of naturalistic truth conditions for both non-moral judgments in nonhuman organisms and moral judgments in human actions and lives?

The second worry is that even if we are able to articulate such truth conditions, it is still an open question whether these conditions would support moral judgments that are consistent with our moral convictions. Will these truth conditions deem particular kinds of individuals (such as gangsters) that we intuitively consider unwholesome characters to be bad *qua* human beings? Or will these conditions support ambivalent, or worse, favorable judgments about such individuals?

The third worry is that even if these truth conditions support moral judgments that are consistent with our moral convictions, it is not clear whether the resulting moral theory would be able to explain the intelligible connection between these judgments and what we have reasons to

⁷ For instance, in a recent review, David Copp and David Sobel conclude that “[o]ur overall assessment of Hursthouse’s program is not optimistic. Nor do we yet see much promise in the underlying strategy that she takes over from Foot.” See David Copp and David Sobel, ‘Morality and Virtue: An Assessment of Some Recent Work in Virtue Ethics’, in *Ethics*, 114 (April 2004), 543. In his review in the online *Stanford Encyclopedia of Philosophy*, James Lenman expresses his fundamental worry about such a program when he claims that “Aristotelian ethics is pervasively informed by an essentialist, teleological conception of the nature of a species that makes very questionable sense in the context of modern science.” See <http://plato.stanford.edu/entries/naturalism-moral/#ConNat>

do as individuals. Even if it can be shown that according to these conditions, being a gangster is incompatible with being a good human being, it is still an open question whether the resulting moral theory can satisfactorily explain why we would then have reason to act in accordance with the judgments supported by these conditions, and care about living lives of virtue rather than living, say, successful gangster lives.

Aristotelian Naturalism in the Face of These Worries

I argue my case for the presence of the dilemma I outlined earlier in the chapter by undertaking an examination of how Aristotelian naturalism fares in the face of these three worries. I begin by constructing a functional Aristotelian account of goodness in the first part of this dissertation. In constructing this account, I draw upon both Foot's and Hursthouse's works, as well as work done by field biologists and by philosophers of biology in functional analysis and explanation. I argue that such an account furnishes a set of naturalistic truth conditions that can be applied to both moral and non-moral evaluations, thus answering the first skeptical worry. In particular, I argue that my functional account can be employed to effectively defend Aristotelian naturalism against recent challenges posed to it by philosophers like William Fitzpatrick, who argue that Foot's view of goodness is seriously undermined in the face of evolutionary considerations.

However, an Aristotelian naturalism based on such a functional account would not fare as well against the second and third worries: The foregoing naturalistic truth conditions cannot be shown to support moral judgments that are consistent with our moral convictions, and we would accordingly have little reason to endorse and act in accordance with the judgments supported by these conditions. Therefore, I argue that although this version of Aristotelian naturalism can be defended against the first skeptical worry, it cannot be successfully defended against the second and third worries.

One might attempt to get around the second and third worries by adopting a different approach to developing Aristotelian naturalism. On this approach, which is the approach adopted by Hursthouse, one holds that moral evaluations of human actions and lives are governed by avowedly normative criteria; criteria which are distinct from and not explicable in terms of the naturalistic criteria governing non-moral evaluations of plants and animals. Such an approach would give rise to a prima facie more plausible moral theory, thus answering the second and third worries. However, on such an approach, moral evaluations of human actions and lives and non-moral evaluations of plants and animals would not be governed by common naturalistic criteria. This being the case, moral evaluations of goodness in human actions and lives would lack a naturalistic foundation. Hence, this version of Aristotelian naturalism would fail to answer the first skeptical worry.

Chapters 2 to 5: How Aristotelian Naturalism Based on a Functional Account of Goodness Can Answer the First Skeptical Worry

The work of constructing my functional Aristotelian account of goodness begins in chapter 2 of this dissertation, and is completed in chapter 5. In chapter 2, I lay the groundwork for this construction by getting clear about the nature of the view of goodness underlying Foot's Aristotelian naturalistic project. If, as Foot claims, a common set of naturalistic truth conditions are to be applicable to both moral and non-moral evaluations of goodness, what must the metaphysical nature of goodness be, on her view? Through comparing Foot's view with certain aspects of the views put forward by P.T. Geach, R.M. Hare and G.E. Moore, I argue that, on her view, goodness is a natural relation rather than a monadic property. On this view, goodness is a natural relation which relates a particular biological or functional kind with particular parts, features, activities or properties that good members of the kind in question need to possess. Such a natural relation, then, furnishes determinate, naturalistically explicable criteria that particular

things belonging to particular kinds must fulfill if they are to be good as members of their respective kinds. For instance, a particular artifact needs to possess particular properties if it is to be good as a member of the functional kind, knife,⁸ and a particular oak tree needs to possess particular parts and features (such as deep and sturdy roots) if it is to be good as a member of the biological kind, oak. In a similar vein, a human being needs to undertake particular virtuous actions and lead her life in a particular, virtuous manner if she is to be a flourishing member of a human community. Understanding what the metaphysical nature of goodness is on Foot's view, then, helps us to understand how it can be the case, on her view, that one and the same concept of goodness can be involved in both moral evaluations of human actions and lives, and non-moral evaluations of plants, animals and artifacts.

In chapter 3, we examine how Foot applies this view of goodness to characterize evaluations of nonhuman living organisms. Specifically, we shall closely examine and assess the plausibility of her views concerning what she terms *natural goodness* in plants and animals, and her incorporation of Michael Thompson's work on Aristotelian Categoricals (ACs) into her account in an attempt to articulate naturalistic criteria for goodness in living organisms.

Thompson's work, I argue, is beset with substantial difficulties, and is in no position to provide naturalistic criteria of goodness for ~~Foot's view of~~ living organisms. This being the case, we need to look elsewhere for such criteria if Foot's view of goodness in living organisms is to be substantiated.

In chapter 4, I go on to examine whether the work of field biologists can provide naturalistic criteria for goodness in living organisms on Foot's view. Such a move is motivated by Foot's remarks that ACs are concerned with "how a kind of plant or animal, considered at a

⁸ Foot brings up this particular example of a knife in her paper, 'Goodness and Choice', in her *Virtues and Vices and Other Essays in Moral Philosophy* (Oxford: Oxford University Press, 2002), 133.

particular time and in its natural habitat, develops, sustains itself, defends itself, and reproduces,”⁹ and by Thompson’s claim that the kind of biological perspective commonly adopted by nature documentary programs and field biologists is the kind that helps us understand what ACs are about. I argue that field biological works cannot by themselves furnish a credible perspective upon which to base naturalistic criteria of goodness in living organisms on Foot’s view.

In chapter 5, I draw upon work done by Larry Wright in functional analysis and explanation to formulate a functional account of Foot’s view of goodness in living organisms, one that is based on the perspective of field biology. There are several considerations motivating such an account. Firstly, if field biology by itself cannot do the work of spelling out clear naturalistic criteria of goodness in living organisms, perhaps a functional account of living organisms based on field biology will prove successful in articulating such criteria. Secondly, as we saw in the foregoing, Foot has indicated that such criteria are to be understood in functional terms. A functional account of goodness in living organisms would have the merit of being consistent with Foot’s ideas about how criteria of goodness in living organisms are to be spelled out. Finally, as I shall show in this chapter, such an account can be employed to effectively defend Foot’s view against recent challenges posed to it by philosophers like William Fitzpatrick, who argue that Foot’s Aristotelian view of goodness is seriously undermined in the face of evolutionary considerations. This being the case, a functional account of Foot’s view of goodness has the advantage of increasing the overall plausibility of her view.

⁹Foot, *Natural Goodness*, 29.

Chapters 6 and 7: A Dilemma for the Aristotelian Naturalist

Although Foot claims that a common functional evaluative structure applies to both moral evaluations of human actions and lives and to non-moral evaluations of plants and animals, she does not go beyond making such a general claim to spell out how such a structure is to be articulated. Hursthouse sees herself as developing in more detail Foot's general idea that "ethical evaluations are analogous to evaluations of tigers (or wolves or bees) as good, healthy specimens of their kind."¹⁰ Accordingly, in chapter 6, I undertake a critical exposition and analysis of Hursthouse's account, as set forth in her book *On Virtue Ethics*. I do this in order to determine whether it is possible to draw upon Hursthouse's account to formulate a functional account of goodness in human actions and lives, one that is similar to the functional account of goodness in living organisms I formulated in the preceding chapter. Is there a way to understand the "proper functions" of human activities as being to bring about the goal of human flourishing, in a way similar to that in which parts, features and activities in an organism can be seen to fulfill proper functions within the organism when they fulfill life functions and bring about the physical flourishing of the organism?

I argue that a functional account of goodness in human actions and lives based on Hursthouse's work cannot plausibly be formulated. This is so because, on Hursthouse's view, criteria of goodness in human actions and lives involve an avowedly normative notion, one which is distinct from and cannot be explicated in terms of the naturalistic criteria that govern non-moral evaluations of plants and animals. This being the case, then, a functional account of goodness in human actions and lives –one which is governed by the same naturalistic criteria as

¹⁰ Rosalind Hursthouse, *On Virtue Ethics* (Oxford: Oxford University Press, 1999), 197.

the functional account of living organisms I formulated in the preceding chapter –cannot plausibly be formulated.

I also argue that although Hursthouse’s account supports a prima facie plausible moral theory, one which shows promise in answering the second and third skeptical worries, such an account lacks a naturalistic foundation, since, on such an account, moral evaluations of human actions and lives and non-moral evaluations of plants and animals are not governed by common naturalistic criteria. This being the case, then, Hursthouse’s approach to developing Aristotelian naturalism fails to adequately address the first skeptical worry.

The less-than-ideal performance of Hursthouse’s approach in addressing the three skeptical worries might lead one to wonder what Aristotelian naturalism’s prospects would be like if Foot and Hursthouse had taken a different direction in constructing their accounts. In particular, how would Aristotelian naturalism have fared in the face of the foregoing skeptical worries if, instead of introducing an avowedly normative notion, Hursthouse had held criteria of goodness in moral evaluations of human actions and lives to be strictly naturalistic criteria that can be spelled out in field biological terms? Such an alternative approach to developing Aristotelian naturalism seems a compelling one, not least because on such an approach, we would have a naturalistic foundation for an Aristotelian account of the virtues. It also seems reasonable to believe that such a foundation would support a determinate set of moral judgments about human actions and lives.

In chapter 7, I examine this alternative approach to developing Aristotelian naturalism in closer detail. In particular, I shall assess how this alternative version of Aristotelian naturalism fares in the face of the second and third skeptical worries. I argue that although this approach has the advantage of being readily able to answer the first skeptical worry, such an advantage is obtained at a considerable price. As I shall show, the moral theory supported by such an

approach fails to show that particular individuals (such as the successful gangster) whom we consider unwholesome characters are bad qua human beings. In fact, the theory would also deem particular individuals that we consider upstanding individuals of our communities to be bad qua human beings. Accordingly, we would have little reason to endorse and live in accordance with the judgments supported by such a theory. This being the case, such an approach fails to answer the second and third skeptical worries.

The Aristotelian naturalist, then, is faced with an unenviable dilemma. If, like Hursthouse, she were to formulate an Aristotelian account that incorporates avowedly normative criteria, her account would support a prima facie plausible moral theory; however, she can achieve this only at the cost of sacrificing a central aim of Aristotelian naturalism, that of basing an account of the virtues on a naturalistic foundation. On the other hand, if she puts forth an account of human flourishing that is explicable solely in terms of field biology, she ends up with a moral theory that supports implausible judgments about virtue and flourishing.

Conclusion

My overall conclusion in this dissertation, then, is that Aristotelian naturalism ultimately cannot support moral judgments that are consistent with our moral convictions while still providing a naturalistic foundation for our judgments about virtue and flourishing. As such, my overall assessment of the prospects for Aristotelian naturalism as a foundation for virtue theory is not optimistic. In putting forth such an assessment, I am not ruling out the possibility of future Aristotelian accounts succeeding in answering this dilemma. In light of the issues outlined in the foregoing, however, the road for builders of such accounts is quite clearly an uphill one.

CHAPTER 2
GOODNESS VS. *GOODNESS* AS AN ANALYSIS OF “GOOD” AND THE ROLE IT PLAYS
IN FOOT’S ARISTOTELIAN PROJECT

Introduction

The purpose of this chapter is to get clear about the view of the ‘metaphysics’ of goodness that seems to underlie Foot’s Aristotelian naturalistic project. If, as Foot claims, a common set of naturalistic truth conditions are to be applicable to both moral and non-moral evaluations of goodness, what must the metaphysical nature of goodness be, on her view? I argue that, on her view, goodness is a natural relation rather than a monadic property.

Since my aim in this chapter is to determine the metaphysical nature of goodness on Foot’s view, the work of this chapter is quite different from that of the rest of this dissertation. The rest of the dissertation is chiefly concerned with whether naturalistic criteria for goodness in both moral and non-moral evaluations can plausibly be articulated, on Foot’s account. This chapter, however, plays an important role in laying the foundation for the work of the following chapters. What the metaphysical nature of goodness is, on Foot’s view, has significant implications for the possibility of carrying out Foot’s project. If, for instance, goodness were to be a monadic property on Foot’s view, it would be difficult to see how one and the same property of goodness could be involved in both moral and non-moral evaluations, as she would then seem to be claiming. If goodness were a monadic property, this would entail that good oak roots and good persons possess the same property of goodness. But it is difficult to see how this could be so since, intuitively, goodness in oak roots is a completely different matter from moral goodness in a person. It would seem to be impossible to articulate a set of naturalistic truth conditions that applies to both moral and non-moral evaluations of things as good. I argue that, in order for it to be possible on Foot’s view for a common set of naturalistic truth conditions to apply to both

moral and non-moral evaluations, goodness on her view cannot be a monadic property. Rather, I argue, goodness must be a natural relation on her view.

My argument for goodness's being a natural relation on Foot's view is carried out in two parts. In the first part of this chapter, I discuss what makes Foot's project an Aristotelian naturalistic project, and what sorts of parameters the project is subject to in virtue of being an Aristotelian one. In connection with this, I also discuss the role that an account of goodness plays in such a project, and the conditions such an account must fulfill in order to serve as a plausible metaphysical foundation for an Aristotelian project.

It is with these considerations in mind that, in the second part, I examine different accounts of goodness, and assess their relative merits with regard to being such a plausible metaphysical foundation. In the course of such an assessment, I look at some aspects of the views put forward by P.T. Geach, R.M. Hare and G.E. Moore. I will show that, on Foot's view, goodness is not a monadic non-relational property, but is, rather, a natural relation. I argue that, on her view, goodness is a natural relation which relates a thing being evaluated to a particular biological or functional kind with particular parts, features, activities or properties that good members of the kind in question need to possess. In this way, such a relation furnishes determinate, naturalistically explicable criteria that particular things belonging to particular kinds must fulfill if they are to be good as members of their respective kinds. For instance, a particular artifact needs to possess particular properties if it is to be good as a member of the functional kind, knife, and a particular oak tree needs to possess particular parts and features (such as deep and sturdy roots) if it is to be good as a member of the biological kind, oak. In a similar vein, a human being needs to undertake particular virtuous actions and lead her life in a particular, virtuous manner if she is to be a flourishing member of a human community.

What Makes Foot's Project an Aristotelian One?

Since Foot claims her project is an Aristotelian naturalistic one, it seems only natural for us to begin our examination of her project with a discussion of what makes her project Aristotelian, and what the characteristics of such a project are. Specifically, in this section, I explain how it is possible to ascribe a functional view of goodness to Aristotle. On such a view, things in the natural world can be characterized as belonging to particular kinds, and a particular thing is to be deemed to be good as a thing of the kind to which it belongs if it fulfills the function/s associated with the kind in question. On this view, common functional criteria of goodness apply to both non-moral judgments of goodness in artifacts and nonhuman organisms, as well as to moral judgments of goodness in human actions and lives. Insofar as Foot's views of goodness can be spelled out in such functional terms, her project can be understood to be an Aristotelian one.

We begin by briefly looking at Aristotle's view of goodness in human actions and lives. In the *Nicomachean Ethics*, Aristotle claims that the good man is one who leads a certain kind of life, one that is characterized by "activity or actions of the soul implying a rational principle." (*Nicomachean Ethics*, 1198a13)¹ On Aristotle's view, such a man engages in such rational activity to an appropriate level of excellence, and such excellence constitutes virtue.

Such a view of goodness in human actions and lives can be understood to be part of a larger naturalistic account of goodness, one that applies to inanimate objects, nonhuman living organisms, and human actions and lives. It is possible to understand Aristotle to be subscribing to a functional view of goodness in things, one which applies to both non-moral evaluations of

¹ This and all subsequent quotations from the *Nicomachean Ethics* (hereafter NE) are from *The Complete Works of Aristotle*, v. 2, tr. Jonathan Barnes (Princeton: Princeton University Press, 1984).

inanimate objects and living organisms, and moral evaluations of human actions and lives.² On such a view, each individual thing in the natural world – this also includes man-made artifacts such as hammers – can be characterized as belonging to a particular kind. Each such kind has a particular form (eidos) associated with it. The form of the kind can, in turn, be spelled out in terms of particular function/s that a thing belonging to the kind must fulfill if it is to be a good thing of the kind. Terence Irwin and Gail Fine explain this aspect of Aristotle’s view of goodness thus:

A hammer, for instance, is not simply a lump of wood and metal, but an instrument for driving nails into wood; the function of driving nails into wood is the form that the matter has acquired by being made into a hammer.³

Insofar as the form of a functional kind can be spelled out in terms of a particular function or set of functions, something that belongs to a particular kind must possess characteristics or properties that enable it to fulfill the function/s associated with the kind if it is to be a good member of the kind. For instance, a particular thing needs to possess characteristics or properties that enable it to drive nails into wood if it is to be a good member of the functional kind, hammer. It is in this way that the form of the kind constitutes a determinate criterion of goodness for members of the kind, since members of the kind must be capable of fulfilling the function or set of functions in terms of which this form is spelled out. This being the case, on Aristotle’s picture, we can evaluate whether particular characteristics or properties of a particular thing belonging to a particular functional kind are good as such properties or characteristics by looking at whether they are capable of operating in such a way as to fulfill the function/s associated with

² Terence Irwin and Gail Fine give a concise account of such a functional interpretation of Aristotle’s view of goodness in *Aristotle: Selections*, tr. by Terence Irwin and Gail Fine (Indianapolis: Hackett Publishing Co., 1995), xvii – xix.

³ *Ibid.*, xviii.

the kind. If they are capable of fulfilling these functions, then the thing is deemed to have actualized the form of the kind to which it belongs, and is a good thing of the kind in question.

A similar functional view of goodness can also be attributed to non-moral evaluations of goodness in nonhuman living organisms in Aristotle. It is with this in mind that Irwin and Fine continue:

In Aristotle's view, something similar holds... for natural organisms; he argues that a plant or animal is not simply a collection of flesh, bone, and tissue, but a whole organized for a particular set of functions, and that these functions are to be identified with the form.⁴

The form associated with the biological kind to which an organism belongs can be spelled out in terms of a set of life functions, and constitutes, as such, a determinate criterion of goodness for the organism as a member of the kind. On such a picture, one might suppose that the organism is deemed to be good as a member of the kind if it possess parts and features and engages in activities that fulfill these life functions. For instance, an oak tree with deep and sturdy roots is deemed, all other things being equal, to be good as a member of the biological kind, oak, since such roots contribute to fulfilling the life functions of survival and reproduction in the oak. We shall examine in more detail Aristotle's view of goodness in living organisms in chapter 4.

Insofar as a human being is an animal, she can, accordingly, be deemed to be good as a member of the human biological kind if she possesses parts and features and engages in biological activities that fulfill the life functions that constitute the form of the kind. Aristotle assumes this in the following passage:

Or as eye, hand, foot, and in general each of the parts evidently has a function, may one lay it down that man similarly has a function apart from all these? What then can this be? (NE 1097b30-2)

⁴ Ibid., xviii.

The form of the human biological kind specifies particular functions that particular parts and features of the human organism (eye, hand, foot, etc.) need to fulfill if the human being is to be good as a member of the human biological kind. This passage also suggests, however, that the functions that a human being can fulfill go beyond merely biological functions, that “man has a function apart from” these functions. What could such a function be, on Aristotle’s picture?

We shall be in a better position to answer this question if we consider it within the framework of Aristotle’s view of goodness, as outlined in the foregoing. If there is a function or set of functions a human being is in a unique position to fulfill, one that goes beyond merely biological functions, there has to be a further distinct form which can be identified with these functions, on Aristotle’s picture. What could this form be? What is it about human beings that makes them uniquely capable of fulfilling this form?

Aristotle’s answer to this last question lies in his account of the human soul. On Aristotle’s view, all living beings are imbued with souls. (NE 1102a29 – b8) The soul is embedded within the living being as a vitalistic life-giving force, and distinguishes living beings from inanimate matter. According to Aristotle, human souls have much in common with the souls of nonhuman animals. The souls of humans have a non-rational capacity that is “the cause of nutrition and growth.” (NE 1102a34-b1) Since animals, like humans, are capable of nutrition and growth, such a capacity is shared by both human and animal souls, and “we can ascribe this capacity of the soul to everything that is nourished.” (NE 1102b2-3) In addition to the capacity that is associated with nutrition and growth, human souls also possess another non-rational capacity, one that is associated “with appetites and in general desires.” (NE 1102b31) This second non-rational capacity is shared by both humans and higher nonhuman animals to which we can attribute such a capacity.

Even though human souls are similar to animal souls in the above ways, they differ in one important respect: There is a third capacity that only human souls can fulfill. Human souls, Aristotle claims, have the capacity to “listen to reason”, which “exhorts them correctly and toward what is best.” (NE 1102b17-33) In addition to the nutritive and appetitive functions, then, a human being is also capable of fulfilling a third, rational function, one which enables her to reflect and deliberate on the operations of the two non-rational functions, and examine whether the actions that she takes and the choices that she makes with regard to these two functions are in her own best interests.

The presence of such a rational function implies, on Aristotle’s picture, that there is a form that is associated with this function, one that is distinct from the form of the human biological kind, and which constitutes, accordingly, a distinct criterion of goodness in human beings. In addition to fulfillment of biological functions, a human being can also be evaluated with respect to whether her choices and actions fulfill the form of the human as a rational being. On Aristotle’s view, it is on the basis of excellence in the exercise of this rational function that we judge a human being to be good as a rational being, or virtuous. (NE 1098a7-18) To the extent that excellence in exercising the rational function can be given a naturalistic explication within the context of Aristotle’s worldview, Aristotle’s view of goodness in human actions and lives can be deemed to be naturalistic.

It is conceptually possible for a contemporary Aristotelian account to aspire towards a similar naturalistic framework while differing in the details of its arguments. In order to qualify as Aristotelian, such an account would have to retain as a central feature the general Aristotelian idea that the goodness of an individual thing is to be decided by whether it fulfills adequately the particular function or set of functions associated with the kind to which the thing belongs. As

much as it remains similar in this respect to Aristotle's original account, however, such an account must depart from Aristotle's original account in many other respects, if it is to be credible in the context of the modern scientific worldview. On Aristotle's picture, the metaphysical conceptions of soul and form are employed to explain the "essence" of living beings. (*Metaphysics* 1032b1-2) According to him, this "essence" is central to the intrinsic natures of living beings. (*Metaphysics* 1030a30-31) In employing the form of the living being as a determinate criterion of goodness, one that a particular living being needs to fulfill if it is to be good as a member of its kind, Aristotle can be seen to be basing evaluations of goodness in living beings on an appeal to a conception of the intrinsic nature of the living being.

Aristotle's conceptions of form and soul, however, make "very questionable sense in the context of modern science."⁵ What qualifies as a naturalistic explication within the context of Aristotle's worldview would probably not gain such acceptance within the context of modern science. What counts as "naturalistic" differs greatly between Aristotle's worldview and our modern scientific one. This being the case, the contemporary Aristotelian cannot, on pain of being dismissed as being unscientific, help herself to Aristotle's metaphysical conceptions in order to furnish criteria of goodness for her account. She is very much on her own here, and has to come up with a recognizably Aristotelian framework with a unified account of what makes something a good thing of its kind, one that applies equally to non-moral evaluations of inanimate objects and nonhuman living organisms, as well as to moral evaluations of human actions and lives. Such an account would have to show that the criteria of goodness for anything in nature (including man-made artifacts) can be given a naturalistic explication that is compatible with modern science. Evaluations of moral goodness in human actions and lives would be one

⁵ James Lenman specifically points this out in his review of Aristotelian naturalism in the online *Stanford Encyclopedia of Philosophy*, at <http://plato.stanford.edu/entries/naturalism-moral/#ConNat>

part of this account, since, on such an account, evaluations of moral goodness, like evaluations of goodness in anything else, can be given a common overarching naturalistic explication.

The movement in contemporary virtue ethics commonly referred to as Aristotelian naturalism can be seen as an attempt to put forth an Aristotelian account based on such a naturalistic framework. As a prominent proponent of this movement, Foot claims that we can come to better understand what is involved in making moral judgments of goodness in human actions and lives by first getting clear about what is involved in making non-moral judgments of goodness in the cases of plants and animals. It is with such an overarching aim in mind that she says in her book, *Natural Goodness*, “I am therefore, quite seriously likening the basis of moral evaluation to that of the evaluation of behavior in animals.”⁶ Moreover, Foot’s account is distinctly Aristotelian in nature, as she holds that the common naturalistic truth conditions that underlie both moral and non-moral judgments are to be spelled out in functional terms. Although she does not go on to specify how exactly such a functional account is to be spelled out, she claims that in undertaking her Aristotelian project,

The question is... whether characteristics of humans can be evaluated in relation to the part they play in human life... In favour of this there is the fact that a certain network of interrelated concepts such as *function* and *purpose* is found where there is evaluation of all kinds of living things, including human beings.⁷

If her Aristotelian account is to be credible, a plausible general account of what makes something good must underpin it. Such an account must be one that is compatible with the general Aristotelian idea that every individual thing belongs to a kind which has a unique function or set of functions associated with it. This account must also support naturalistic criteria of goodness in things that are compatible with modern science.

⁶ Foot, *Natural Goodness*, 16.

⁷ *Ibid.*, 40.

Why Goodness on Foot's View Cannot be a Monadic Property

What could qualify as such an account of goodness? In the introduction to *Natural Goodness*, Foot rules out the Moorean idea that goodness is a monadic property that all and only all good things have in common. She argues, against G.E. Moore, that “in most contexts, ‘good’ requires to be complemented by a noun that plays an essential role in determining whether we are able to speak of goodness rather than badness, or indeed of goodness or badness at all.”⁸

In order to understand why it is that a Moorean view of goodness cannot underpin her Aristotelian account – and, by extension, in order to better understand what sort of view can – it is worth taking a brief look at what the Moorean account entails. At the beginning of *Principia Ethica*, Moore argues that ethics is concerned with the question of what good conduct is. However, Moore continues, “being concerned with [the question of what good conduct is], it obviously does not start at the beginning, unless it is prepared to tell us what is good as well as what is conduct.”⁹ If ethics is to be in a position to answer the question of what good conduct is, Moore can be taken to be saying, it must first tell us what “good” refers to, as well as what “conduct” refers to. This is important, Moore continues, because “all conduct is not good... some is certainly bad and some may be indifferent. And on the other hand, other things, besides conduct, may be good.”¹⁰ All this, Moore concludes, suggests that “‘good’ denotes some property that is common to [all these things] and conduct; and if we examine good conduct alone of all good things, then we shall be in danger of mistaking for this property, some property which is not shared by those other things...”¹¹ Moore goes on to argue that goodness is a property that

⁸ Ibid., 2.

⁹ G.E. Moore, *Principia Ethica* (Cambridge: Cambridge University Press, 1903), 54.

¹⁰ Ibid., 54.

¹¹ Ibid., 54.

all good things have in common. Moreover, it is a property that cannot be identified with any natural property found in any of the things that are good. This indicates, Moore argues, that goodness is not a natural property, but is, rather, a non-natural property. It is, moreover, a simple and indefinable property that cannot be analyzed into further parts. Goodness, Moore continues, is “incapable of any definition because it is simple and has no parts.” It 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.”¹²

Attempting to determine whether goodness should be taken to be a non-natural or natural property would be no mean feat. In any case, such a determination is not our concern here: Foot’s primary point of contention with Moore’s account is not that it holds goodness to be a non-natural property. Her main contention against Moore is, rather, that goodness should be understood to be a relation in most contexts rather than a monadic non-relational property, as Moore takes goodness to be. This being the case, we shall focus, in what follows, on how Foot supports her view that goodness is a natural relation.

As we saw above, Foot does not agree with the Moorean view that goodness is a monadic, non-relational property; she believes that, at least in most contexts, “‘good’ requires to be complemented by a noun that plays an essential role in determining whether we are able to speak of goodness rather than badness, or indeed of goodness or badness at all.” Put in terms of property talk, Foot can be understood to be saying that goodness is not a monadic, one-place property, but is, rather, a two-place relation which requires two relata in order to be instantiated. These relata are (i) the thing of which we predicate goodness, and (ii) the kind that the noun that complements “good” refers to. For instance, if one points at an artifact and says, “This is a good

¹² Ibid., 61.

thing”, such an evaluation of goodness would not be intelligible unless we know what the artifact is supposed to be good as. In order for this evaluation to be intelligible – in order to be able to speak “of goodness or badness at all” – we need to know the functional kind as a member of which the artifact is being evaluated. Are we deeming the artifact to be good as a knife? As a crowbar? Or as a member of some other functional kind? Similarly, if one points at a horse and says, “This is a good animal”, we would need more information in order for this evaluation to be fully intelligible. It could be the case that the person making the evaluation is deeming the horse to be good as a puller of plows. If this is so, then one would be evaluating the horse as a member of a functional kind. It could also be the case, however, that one is deeming the horse to be a fine specimen of the biological kind, horse.

We can try to understand the difference between Moore’s and Foot’s respective views of goodness in the following way. Moore might be seen to be holding that, when we predicate goodness of something, x , we are simply making the judgment

(a) x is good

where the logical form of the proposition expressed by (a) is

(a’) Gx

On Foot’s view, however, this is not the proposition that is being expressed by such a judgment.

On her view, (a) is really shorthand for

(b) x is a good y

or

(b1) x is good as a y

where “y” is standing in for a term referring to a kind. Hence, on Foot’s view, the logical form of the proposition in question is really

(b’) xGy

where “y” is a term referring to the kind that the noun that Foot thinks needs to be understood as complementing ‘good’ refers to. In many cases, where there is no noun that complements “good”, the reference to the kind is supplied by the context. For instance, in a case in which one points to a knife and says, “This thing, x, is good,” one might be understood to be saying “x is good as a knife.”

Put in ordinary language, then, we can understand Foot to be claiming that in most contexts, we cannot properly speak of something’s being good simpliciter. In most contexts, if something is to be correctly described as good, it has to be a good so-and-so, or good as a so-and-so.

Goodness as Foot’s Natural Relational Account of Goodness

How does Foot support her view of goodness? She supports her view by drawing upon work done by P.T. Geach in his paper ‘Good and Evil.’ Accordingly, in what follows, we shall examine Geach’s work with the aim of understanding how it offers support for Foot’s view. Geach begins his paper by making a linguistic point. In his paper, Geach states that in the phrase “an x is an A B”, where “A” is an adjective and “B” is a noun,

- (1) “A” is a predicative adjective if and only if “an x is an A B” entails both that “an x is A” and “an x is a B.”
- (2) “A” is an attributive adjective if and only if “an x is an A B” entails “an x is a B”, but not “an x is A.”¹³

¹³ Geach’s original account can be found at P.T. Geach, ‘Good and Evil’, in Philippa Foot (ed.), *Theories of Ethics* (Oxford: Oxford University Press, 1986), 64.

According to Geach's distinction, the phrase "x is a red car" would feature a predicative adjective, "red." This is so, because the phrase "x is a red car" entails the truth of "x is a car," and the truth of "x is red." By contrast, according to Geach, the phrase "x is a small elephant" would feature an attributive adjective, "small." This is so, because although the phrase "x is a small elephant" does entail ~~the truth of~~ "x is an elephant," it does not entail ~~the truth of~~ "x is small," not unless we are using "small" here in a special sense, such as "small for an elephant," or unless the context is such that "for an elephant" is understood. This example also suggests a peculiarity in the functioning of attributive adjectives. It is arguably the case that nothing can be small simpliciter, at least not in the ordinary sense of "small": For any x, if x is to be properly described as small, it has to be a small so-and-so.

Geach claims that such a peculiarity is also present with "good" and "bad", which, he claims, are attributive adjectives. Properly speaking, Geach claims, "there is no such thing as being just good or bad, there is only being a good or bad so-and-so."¹⁴ Applying Geach's distinction to attributions of goodness, Foot remarks that:

[w]hether a particular F is a good F depends radically on what we substitute for 'F'. As 'large' must change to 'small' when we find that what we thought was a mouse was a rat, so 'bad' may change to 'good' when we consider a certain book of philosophy first as a book of philosophy and then as a soporific.¹⁵

Although Geach's claim is a linguistic one, such a claim, if plausible at the linguistic level, has considerable implications for the metaphysical status of goodness. There seems to be, at least in most contexts, some initial plausibility to his claim that we cannot properly speak of things being good or bad simpliciter, that "there is only being a good or bad so-and-so." This initial plausibility seems to point towards goodness being a particular kind of relation rather than a non-

¹⁴ Ibid., 65.

¹⁵ Foot, *Natural Goodness*, 3.

relational monadic property. For one, it seems difficult to square the view that goodness is a non-relational monadic property with the linguistic claim that nothing can be good simpliciter. If *x* is a good *y*, and “good” were to refer to a non-relational monadic property, we would have to say that *x* possesses that monadic property. Difficulties arise when we consider the many examples in which something might be a good *y*, but not a good *z*. Something might be a good knife (or good as a knife), but not a good crowbar (or good as a crowbar), for instance. The Moorean – as well as whoever it is who holds the view that goodness is a non-relational monadic property – would be saddled with the burden of explaining how it is that something could possess this supposed monadic property in certain contexts but not in others. In fact, the Moorean could even be saddled with a contradiction. For if “*x* is a good knife” entails “*x* possesses the monadic property of goodness,” as the Moorean account would evidently have to hold, then “It is not the case that *x* is a good crowbar” would have to entail “It is not the case that *x* possesses the monadic property of goodness.” Thus, it both is and is not the case that *x* possesses the monadic property of goodness, and we have a contradiction. In order to avoid such problems, the Moorean must make room for a use of “good” to express a relation as well as the use of “good” she insists on, in which “good” refers to a non-relational monadic property. The Moorean must, then, say that “good” is ambiguous: He must say that “good” sometimes ascribes the monadic property of goodness, and sometimes ascribes a relation, as in the sentence, “*x* is good as a knife.”

The aforementioned linguistic considerations about the implausibility of describing something as being good simpliciter in most contexts suggest that “good” is at least ambiguous, that “good” ascribes a monadic property in some contexts and a relation in others. This being the case, these considerations alone do not conclusively establish Foot’s view of goodness. Nor do they rule out the Moorean view of goodness: Even if Geach’s and Foot’s views do ultimately

prove to be correct, this does not imply that nothing can be good simpliciter. After all, Foot's initial claim is only that in *most* contexts, "good" refers to a relation rather than to a non-relational monadic property. Thus, the correctness of Geach's and Foot's views may imply that the adjective "good", as it is used in everyday language, ~~is a rather vague one that~~ may express or ascribe either of two different metaphysical entities, a monadic non-relational property or a relation. In this case, the objection to Moore would be that his ~~view~~ does not give a complete picture of what we may be referring to in our everyday uses of "good." For the sake of clarity, we shall henceforth refer to the relation that Foot and Geach argue for as "*goodness as*", in contrast to Moore's monadic goodness *simpliciter*.

In order to successfully establish that "good" actually does in some cases ascribe the relation *goodness as*, one must put forward a plausible positive account of the nature of such a relation and the conditions for its instantiation. If *goodness as* is a relation, then in the sentence "x is good as a knife," the expression "good as" can be understood to predicate a certain relation between x and the kind knife, in a way analogous to that in which, in the sentence "x is small as an elephant," the expression "small as" predicates a certain relation between x and the kind elephant. What is the nature of this relation that "good as" predicates?

We can begin by asking: Is there one common relation that "good as" expresses or ascribes in all the different cases in which we say that things are good so-and-sos, or good as so-and-sos? One possible response to this question is to adopt a prescriptivist position, and simply deny that "good as" refers to any property or relation at all. On this view – a prominent advocate of such a view is R.M. Hare – the common underlying meaning of "good as" is not a descriptive one, but an "unvarying commendatory force." Geach resists this prescriptivist move. He begins by admitting that:

The traits for which a thing is called 'good' are different according to the kind of thing in question; a knife is called 'good' if it is UVW, a stomach if it is XYZ, and so on. So, if 'good' did have a properly descriptive force this would vary from case to case: 'good' applied to knives would express the attributes UVW, 'good' as applied to stomachs would express the attributes XYZ, and so on.¹⁶

To say that something is good as a knife is to say that it has properties UVW, to say that something is good as a stomach is to say that it has properties XYZ, etc., so that, at least at first glance, there does not seem to be anything in common between all the things of which we predicate the expression "good as" followed by a kind term, as in "good as a knife." However, Geach goes on to argue, to jump from such an observation to the conclusion that the common underlying meaning of "good as" cannot be a descriptive one but must, rather, be an "unvarying commendatory force," is to commit "a mere fallacy." To illustrate how there could still be a common descriptive meaning – and thus, a common overarching relation expressed by "good as" – even if "good as" is associated with different particular properties in different cases, Geach brings up a mathematical analogy: "There is no one number by which you can always multiply a number to get its square: but it does not follow either that 'square of' is an ambiguous expression... or that you have to do something other than multiplying to find the square of a number... given a number, its square is determinate."¹⁷ Similarly, Geach continues, although "there is no one description to which all things called 'good so-and-sos' answer... it does not follow either that 'good' is a very ambiguous expression or that calling a thing good is something different from describing it."¹⁸ This is so, because although there are no common traits possessed by all things that we call "good so-and-sos," the meaning of the word "good", taken together with the meaning of the kind term in question ("knife," "stomach", etc.), enables us to specify

¹⁶ Geach, *op. cit.*, 68.

¹⁷ *Ibid.*, 69.

¹⁸ *Ibid.*, 69.

the traits which the thing in question needs to have in order ~~truly~~ to be called a good thing of its kind, or good as a so-and-so. Given a particular kind of thing, then, the traits that it needs to have in order to be called a good thing of its kind are determinate. On Geach's view, then, the relation *goodness as* can be seen to be introducing a function that relates a kind (e.g. knife) to a set of properties (i.e. whatever the properties are that make a knife a good one). So such a function relates a knife to UVW, a stomach to XYZ, a horse to HYU, and so on.¹⁹ We can understand Geach to be holding the view that in all these diverse cases, "good as" expresses a common function, one which serves to relate a given kind to a particular set of good-making properties.

What is there in common between all the particular good-making properties that the "good as" function takes individual kinds to? Unless we can answer this question, we will not be able to articulate clearly a distinctive "good as" function that is common to all these diverse cases. Simply saying that all these properties are whatever the properties are that make things good as members of particular kinds will not do: What is needed is a naturalistic explication of what makes something a good-making property associated with a particular kind.

Foot seems to have such an explication in mind when she states in her essay "Goodness and Choice" that "[w]here a thing has a function the primary... criterion for the goodness of that thing will be that it fulfills its function well."²⁰ How is the thing's function determined? Foot claims that the thing's function is not determined by "facts about the speaker's choices."²¹ She claims,

¹⁹ This understanding of "good as" as introducing a function on Geach's view was suggested to me by David Copp.

²⁰ Foot, "Goodness and Choice", 132.

²¹ *Ibid.*, 132.

No matter what [a speaker] may do in the way of choosing knives which are M he cannot say 'M knives are good knives' unless M is a relevant characteristic, or unless he is prepared to show that M knives are also N knives, and N is a characteristic of the right kind.²²

On Foot's view, then, something that belongs to a functional kind is good as a member of the kind only if it possesses the relevant characteristics or properties – presumably these would be properties that enable it to adequately fulfill the function/s determined by the functional kind in question. Such a functional view of goodness in inanimate objects is consistent with Foot's metaphysical view of goodness as a natural relation. Foot can be understood to be holding that, in cases of inanimate objects that are members of functional kinds, goodness is a relation which requires two relata in order to be instantiated. These are (i) the inanimate object which we predicate goodness of, and (ii) the functional kind to which the object belongs. Such a functional view of goodness is also Aristotelian in character, since such a view is congruent with the general Aristotelian idea that the goodness of an individual thing is determined by whether it fulfills adequately the particular unique function or set of functions associated with the kind to which the thing belongs. Such a functional view is also compatible with the contemporary scientific worldview, since there is good reason to believe that criteria for inanimate objects' being good as members of functional kinds readily admit of naturalistic explication.

Conclusion

However, Foot does not go on to articulate such criteria in her work. In chapter 5, I put forth a functional account of goodness in inanimate objects, one that is consistent with Foot's view as outlined in the foregoing, and which clearly spells out criteria that inanimate objects need to fulfill if they are to be good as members of functional kinds. I also argue that the general features of such an account can be applied to Foot's view of living organisms to formulate a

²² Ibid., 133.

similar functional account of goodness in living organisms, one that gives rise to naturalistic criteria for goodness in living organisms.

However, we are not yet in a position to formulate these functional accounts. If we are to successfully articulate such functional criteria for goodness in both inanimate objects and living organisms on Foot's view, we need to first understand Foot's view of goodness in living organisms. Can Foot's relational view of goodness, as outlined in this chapter, yield a plausible naturalistically explicable account of what it is for a plant or an animal to be a good member of its biological kind? What sorts of parameters are criteria of goodness subject to on Foot's view of living organisms? What has Foot done in articulating such criteria? Are these criteria plausible? These questions will take center stage as we turn, in the next chapter, to a critical exposition and analysis of Foot's account of what she terms natural goodness in living organisms, as well as to an examination of Michael Thompson's account of Aristotelian Categoricals, from which Foot's account draws.

CHAPTER 3
NATURAL GOODNESS: FOOT'S NATURAL RELATIONAL VIEW OF GOODNESS
APPLIED TO NONHUMAN LIVING ORGANISMS

Introduction

In the preceding chapter, we outlined the basic schematic structure of Foot's account of goodness as a natural relation. We saw that on Foot's view, "good" ascribes a two-place relation rather than a monadic property in most contexts. We examined the nature of this relation and the conditions for its instantiation in inanimate objects. Specifically, we considered what it amounts to, on Foot's account, to say that a particular inanimate object is a good thing of a particular functional kind. In this chapter, we examine how Foot applies the same overall relational view of goodness – which is characterized by the relation *goodness as*, as outlined in the preceding chapter – to evaluations of nonhuman living organisms. Although her view can also be applied to human beings insofar as they are considered as animals, the primary focus of our examination shall be on how Foot attempts to apply this view to non-moral evaluations of goodness in nonhuman organisms, since her examples in *Natural Goodness* mainly feature plants and nonhuman animals.

In the course of this examination, we shall assess whether her view yields a plausible naturalistically explicable account of what it is for a plant or an animal to be a good member of a particular biological kind. Specifically, we shall closely examine and assess the plausibility of Foot's views concerning what she terms *natural goodness* in plants and animals, and her attempt to incorporate Michael Thompson's work on Aristotelian Categoricals (ACs) in fleshing out her views in this area. On Foot's view, an organism that is good as a member of its biological kind possesses natural goodness. In the first part of this chapter, I will carry out an exposition and examination of what natural goodness in an organism amounts to, on Foot's view. The basic idea is that, if one is to determine whether a particular organism possesses natural goodness and is

good as a member of its biological kind, one needs first to determine whether its parts, features and activities also possess natural goodness by contributing to the physical flourishing of the organism.

This implies that, on Foot's view, there is a distinctive set of parts, features and activities that an organism belonging to a particular biological kind must possess and engage in if the organism is to possess natural goodness and be good as a member of the kind in question. If Foot's account is to be able to identify such a distinctive set of parts, features and activities, there needs to be a set of naturalistic criteria which can be employed in identifying such parts, features and activities. Foot draws upon Thompson's work on ACs in an attempt to articulate such criteria. Thompson's work, I argue, is beset with substantial difficulties, and is in no position to provide such criteria of goodness for Foot's view of living organisms. This being the case, we need to look elsewhere for such criteria if Foot's claims of natural goodness in living organisms are to be justified.

The Story of Goodness Thus Far

In the preceding chapter, we saw that, on Foot's account, we cannot, in most contexts, properly speak of an inanimate object's being good simpliciter: In most contexts, when we call an object good, we are in fact saying that it is *good as* a member of a particular functional kind. In metaphysical terms, we are ascribing a certain natural relation, *goodness as*, to the object in question as it relates to the relevant kind. For a particular inanimate object to be good as a member of a particular functional kind is, in turn, for the object in question to possess the relevant characteristics and properties necessary for it to fulfill well the function/s determined by the functional kind in question.

When an object is a good member of a particular functional kind, it may also tend to further the concerns or interests of some human being, animal or plant. In being good as a steak

knife, for instance, an object possesses characteristics or properties that typically enable it to further the interests or concerns of human beings engaged in particular activities, such as cutting meat, for instance. Inanimate objects that have the relation *goodness as* ascribed to them, then, may also possess another kind of goodness, which Foot refers to as *secondary goodness*. Something can be said to possess secondary goodness just in case it furthers the concerns or interests of some human being, animal or plant. By virtue of possessing secondary goodness, Foot remarks, “almost anything in the world can be said to be good or bad in a context that sufficiently relates it to some human concern or to the needs of a plant or animal.”¹

It is worth noting here that Foot is only committed to saying that there is *typically* a connection between something’s being good as a member of a functional kind, and that same thing’s furthering a living being’s interest, or possessing secondary goodness. Although Foot does not discuss this in her work, she does not rule out (nor is there any reason to think that she would) the possibility of there being contexts in which inanimate objects that are good as members of functional kinds nevertheless do not further the interests of any living beings, human or nonhuman. I believe that Foot does not mention such contexts because they are not of central concern to her overall project. It is conceivable that an object could belong squarely within a functional kind, possess characteristics or properties that would enable it to fulfill well the function/s associated with the functional kind, yet not further the interests of any living being. For instance, an object may possess all the characteristics or properties that enable it to fulfill well the functions of a steak knife, yet further no human interest because it had been locked up in a chest for years, its existence unbeknownst to all.

¹ Foot, *Natural Goodness*, 26.

It is not only inanimate objects that can have the relation *goodness as* ascribed to them, or possess secondary goodness. In our everyday lives, we can and do evaluate whether nonhuman living organisms fulfill well the functions determined by particular functional kinds, and we typically do this in assessing whether they are capable of furthering our concerns. We do this, for example, in evaluating whether a horse has the characteristics or properties that would enable it to function as a good steed, or in evaluating whether particular plants possess the characteristics or properties that we desire them to possess in order to fulfill certain aesthetic purposes. In this way, then, Foot's account of "good" as ascribing a natural relation, as outlined in the preceding chapter, can apply to nonhuman living organisms, insofar as we can and do evaluate whether nonhuman organisms fulfill well the functions determined by particular functional kinds in assessing whether they are capable of furthering our concerns.

Natural Goodness in Nonhuman Living Organisms

Nonhuman living organisms, however, are not merely good as members of functional kinds; nor do they possess only secondary goodness. We can look at a healthy and powerfully-built horse on a horse farm or in a stable, and judge that it is good as a steed. It seems equally possible, however, for us to look at the same horse galloping across a field or meadow, and say, "This is a fine horse," where the positive evaluation here does not have to pertain to the horse's goodness as a steed, or as something that furthers any of our concerns. It is certainly possible that one could undertake such an evaluation with a view to the goodness of the horse as a steed; but it seems at least equally possible that in such a case we would not making an evaluation of the horse's goodness in connection with any of our own concerns. Rather, it seems quite possible that in such a case, we are saying that this horse is a fine specimen of a horse, or is good as a member of the biological kind, horse. In a similar vein, when we look at a healthy oak tree, we could judge that it is a good oak tree in view of the fact that such a tree is good as a provider of

shade and oxygen for us, or as something that makes our living environment more aesthetically pleasing. It seems equally possible, however, that we could instead be judging that this tree is a fine specimen of an oak tree, or is good as a member of the botanical kind, oak. Foot calls this latter kind of goodness that nonhuman living organisms might possess *natural goodness*. It is with this kind of goodness in mind that Foot claims that, in addition to secondary goodness, “features of plants and animals have what one might call an ‘autonomous’, ‘intrinsic’, or as I shall say ‘natural’ goodness and defect that may have nothing to do with the needs or wants of the members of any other species of living thing.”² What exactly is the nature of this natural goodness in plants and animals? What criteria must the parts, features and activities in an individual organism fulfill if the organism is to possess such goodness and be good as a member of its biological kind?

Before we can arrive at any answers to these questions, we need to begin by looking at Foot’s account of natural goodness. Natural goodness can manifest itself in a living organism in two ways. A part or feature of a plant or animal can be said to possess natural goodness if it contributes to the physical flourishing of the plant or animal in question by fulfilling particular biological functions within the organism. Such an attribution of goodness can be made without any reference to the needs or interests of any other living thing. For instance, in the case of an oak tree, we say that deep and sturdy roots are good for the tree, in that they contribute to the healthy growth of the tree by enabling the tree to absorb nutrients from the soil. Such an attribution of goodness to these roots is made without any reference to the needs or interests of any other living thing. In the same vein, we might also say, for instance, that having a hard shell is good for the tortoise, in that hard shells contribute to the healthy growth and survival of

² Ibid., 26.

tortoises. As in the case of the oak, such an attribution of goodness is again made without any reference to the needs or interests of any other living thing.

The plant or animal as a whole can also be said to possess natural goodness if it is a healthy and physically flourishing member of its biological kind, if it is *good as* a member of the biological kind in question. All other things being equal, in order for a plant or animal to be good as a member of its biological kind, on Foot's view, it needs to possess parts or features that possess natural goodness and contribute to the organism's physical flourishing. All other things being equal, then, a living organism's possessing natural goodness is a function of the possession of natural goodness by its parts and features.

A Metaphysical Issue Surrounding Natural Goodness

In making attributions of natural goodness in both the examples of the oak tree's roots and the tortoise's shell, we speak of a particular part or feature being *good for* a particular organism. Are we attributing a natural relation when we say that something is *good for* an organism's physical flourishing? At least at a first glance, there seem to be good reasons for thinking that the answer to this question is yes. Insofar as we can define something's being good for an organism in terms of its contributing to the organism's physical flourishing, and the notion of physical flourishing can, in turn, be given a naturalistic explication, there seems to be good reason to believe that, when we say that a part or feature is good for an organism, we are attributing a natural relation, one that holds between the part or feature in question and the organism. If this is the case, then, schematically, when we say that a particular part or feature, X, is good for a particular organism, O, we are putting forth the proposition

(b_{ng}) X is good for O

or

(b_{ng'}) XG_nO

where G_n is the natural relation that “good for” refers to. This brings up further questions: Is G_n a natural relation that is distinct from the natural relation *goodness as*? If G_n is distinct from *goodness as*, what implications does the presence of this new relation have on the overall plausibility of the metaphysical picture underlying Foot’s view of goodness?

My concern in the rest of this chapter – and indeed, in the rest of this dissertation – is not with such metaphysical issues in Foot’s work. Instead, I am concerned with whether naturalistic criteria for goodness in nonhuman living organisms can be articulated on Foot’s view, and whether such criteria can, in turn, serve as the foundation upon which to articulate a further set of naturalistic criteria for goodness in moral evaluations of human actions and lives. It is with such concerns in mind that I go on, in what follows, to examine Foot’s attempt to incorporate the work that Michael Thompson has done on ‘Aristotelian Categoricals’ into her project. I do this with the aim of assessing whether her incorporation of Thompson’s work succeeds in articulating naturalistic criteria for goodness in nonhuman living organisms. The question of whether such criteria for goodness can be articulated on Foot’s view has significant implications for the plausibility of the metaphysical picture underlying her view. If it turns out that such naturalistic criteria can in fact be plausibly articulated – and, as I shall argue in chapter 5, they can – this would lend significant support to the plausibility of the basic metaphysical structure of Foot’s view. Therefore, even though my work in this dissertation is not primarily metaphysical in nature, it does ultimately have significant implications for questions concerning whether goodness can plausibly be construed as a natural relation.

An Examination of ACs as Expressing Naturalistic Criteria for Goodness in Nonhuman Living Organisms

We now turn our attention to Thompson’s work on what he calls Aristotelian Categoricals. Thompson’s main claim, as set forth in his paper, ‘The Representation of Life’, is that certain

distinctive descriptions that we make of living organisms are logically dependent on the nature of the species to which the organisms belong. Such descriptions, which Thompson calls "Aristotelian Categoricals" (ACs), express what Thompson calls *natural historical judgments*. Such judgments, Thompson goes on to point out, are canonically expressed by sentences of the form "The S is (or has, or does) F",³ where 'S' holds a place for the name of a species and 'F' holds a place for a predicate. An example of such a sentence would be "The cat has four legs."⁴ In what follows, I undertake a brief exposition and examination of Thompson's work, with a view toward assessing whether his work can furnish the criteria that Foot needs in order to pick out a particular set of parts, features and activities as those that make a particular organism good as a member of a given species.

To begin with, ACs are somewhat peculiar, in that it is hard to pinpoint what the subject term in these sentences refers to. "The cat has four legs" clearly does not refer to an individual cat, since it is supposed to express a certain feature that is found in members of the species in general. Nor does it predicate something of every member of the species, since there are clearly three-legged cats. One might perhaps think it more promising to suppose that "The cat" refers here to the species, so that the sentence might be taken to predicate something that is true of members of the species in general. If this is true, then something like "For the most part, S's are Fs" would aptly capture what is asserted by such sentences: According to Thompson, however, "The mayfly breeds shortly before dying" expresses a true natural historical judgment, even though most mayflies in their natural habitat actually die long before breeding.⁵ Similarly, to use

³ Michael Thompson, 'The Representation of Life', in Rosalind Hursthouse, Gavin Lawrence, and Warren Quinn (eds.), *Virtues and Reasons* (Oxford: Clarendon Press, 1995), 281.

⁴ This example, though inspired by Foot's original account at *Natural Goodness*, 28, is essentially my own.

⁵ Thompson, 'The Representation of Life', 284.

another example from a somewhat more familiar life-form, “Fish eggs develop into fish” would express a true natural historical judgment, even if, in natural habitats, most fish eggs are either eaten by predators or are swept away by river currents, and never develop into fish. Hence, whatever the truths are that Thompson intends ACs to express, they cannot be statistical generalizations about a species. A natural historical judgment may express a truth about the nature of a particular species which is not often borne out in the natural environment in which the species is found, statistically speaking. As Thompson states, “[a] natural historical judgement may be true though individuals falling under both the subject and predicate concepts are as rare as one likes, statistically speaking.”⁶

The truth of natural historical judgments, then, is not decided by statistical facts about organisms belonging to particular species or biological kinds. Rather, the truth-conditions of such judgments are to be furnished by what Thompson calls a “natural-history account” of the life form or species. Briefly put, such an account can be described as a story of how creatures of that particular species live. More specifically, it is a story detailing the sorts of activities they undertake and the parts and features they need to possess in order to provide life-sustaining nourishment for themselves, reproduce, defend themselves, and, in general, to fulfill the myriad functions necessary to physically flourish as members of that particular species. Without reference to such a story, Thompson claims, “life activities” such as eating, for instance, cannot even be identified in an individual living thing. Eating is essentially related to nourishment, and cannot be uniquely captured by a merely physiological account about the taking in, crushing, transforming, and spewing out of substances. The process that is characteristic of eating in a particular creature – and the true natural-historical judgments reflecting the parts, features and

⁶ Ibid., 285.

activities that constitute this process – can only be uniquely identified by reference to a story that tells us what creatures belonging to that particular species do in order to fulfill the end of providing life-sustaining nourishment for themselves.

Thompson fully intends his framework of natural-historical judgments backed by natural-history accounts to be deployed for the purpose of supplying the normative criteria for making evaluations of natural goodness in plants and animals in Foot's account. He states that "[i]f... we want to apply 'normative' categories to subrational nature, and apart from any relation to our interests... [t]he system of natural-historical judgements supplies such a standard for members of that kind."⁷ In making such a statement, he can be understood to be claiming that his framework provides the resources by which one can make the kinds of evaluative judgments with regards to a particular member of a particular species that, according to Foot, "have nothing to do with the needs or wants of the members of any other species of living thing."⁸ Specifically, Thompson claims, if there is a true natural-historical judgment that "the S is F", and an individual member of species S, s, is not F, then we can conclude that this individual S is defective in some way. (Depending on what 'F' refers to, we may deem this individual to be diseased, weak, or in some other way defective).⁹ Thompson's proposal (which Foot essentially accepts)¹⁰ can be represented in a syllogistic form as follows:

The S is F.

This particular member of species S, s, is not F.

⁷ Ibid., 295.

⁸ Foot, *Natural Goodness*, 26.

⁹ Thompson, 'The Representation of Life', 295.

¹⁰ Relating Thompson's account, Foot states that "he [Thompson] says that if we have a true natural-history proposition to the effect that S's are F, then if a certain individual S... is not F it is therefore not as it should be, but rather weak, diseased, or in some other way defective." Immediately after this, she endorses Thompson's account by stating that, "[e]ssentially, I think Thompson is right about this." See *Natural Goodness*, 30.

Therefore, *s* is defective in that it is not *F*.¹¹

In the above schema, “The *S* is *F*” expresses a natural historical judgment, one of a whole series of such judgments supplied by the natural history account of the species in question. “This particular member of species *S*, *s*, is not *F*” is a statement describing a particular member of species *S*. Assuming, as Thompson claims, that the natural historical judgment supplies the normative standard for evaluating a particular member of *S* in a particular respect, it follows that this particular member of species *S* can be deemed to be defective in that it is not *F*.

Facts about what members of a particular species need to do, or parts or features that they need to possess in order to flourish physically jointly constitute what Thompson calls the life form of the species, and the truth of particular natural historical judgments depends on whether they conform to these facts. A particular member of a species can, in turn, be said to adequately live out the life-form of the species in a particular respect if a particular description of that member is in conformity with a true natural historical judgment pertaining to that species. In order for a particular individual to live out fully the life-form of its species and be good as a member of that species, it has to possess all the parts and features that are predicated of the species by all the true natural historical judgments based on the life form of the species.

Difficulties with Thompson’s ACs

Do ACs furnish us with adequate criteria for picking out a particular set of parts, features and activities qualifying an organism as a good member of a species? Thompson’s claim is that, given a particular species, we can identify the natural historical judgments that comprise its natural history. Based on these judgments, we can then determine whether or not a particular

¹¹ Thompson, ‘The Representation of Life’, 295.

organism is good as a member of that species by examining the organism to see if it possesses the parts, features or activities that are predicated of that species by such judgments.

Assuming that we can identify the natural historical judgments for any given species, it is not obvious that an organism has to possess all of the parts, features and activities predicated of the species by these judgments in order to be good as a member of that species. This is so, because there could very well be true natural historical judgments which are not relevant to the goodness of an organism as a member of its species. For instance, suppose “The cat has a long tail” expresses a true natural historical judgment. Suppose, further, that there is a cat that has a short tail, but which otherwise possesses all of the other parts and features predicated of the species. In fact, it is, in all other respects, an outstanding specimen of a cat: Not only does it have four legs, two ears and two eyes, but it is also exceptionally agile, and possesses exceptionally strong legs, which make it good at catching mice (we are assuming, for the sake of argument, that “The Cat catches mice” is also a true natural historical judgment). It would seem to go against what Foot wants to capture by her notion of natural goodness if we were to judge that such a cat cannot be considered good as a member of the species simply by virtue of not having a tail that is long enough. Perhaps this means that there is some kind of a hierarchy among the natural historical judgments predicated of any given species, so that there are some “vital” parts and features, and activities that an organism absolutely must possess in order to be considered good as a member of the species in question, and some “optional” features and properties (a cat’s having a long tail might presumably be one of these) that do not decisively determine whether it is good as a member of the species. If there is indeed such a hierarchy in place, there needs to be a systematic, non-arbitrary method of drawing the distinction between “vital” parts, features and

activities and “optional” ones. No such method seems to be present or forthcoming in either Foot’s or Thompson’s account, to my knowledge.

Moreover, further consideration suggests that trying to identify a unique set of natural historical judgments for a given species may not be such a straightforward matter. In trying to identify a set of Aristotelian Categoricals that furnish the normative criteria of natural goodness for a species, both Foot and Thompson have in mind a set of criteria that can allow us to evaluate whether a plant or animal is a flourishing member of its species. As we saw in the foregoing, such criteria are not statistical generalizations. This being so, it cannot be the case that just any statement of the form “The S is (or has, or does) F” pertaining to a particular member of S qualifies as a natural historical judgment, since many statistical generalizations can be expressed in precisely this form.

If Thompson’s proposal is to be credible, then, some systematic way of distinguishing between statements that articulate meaningful normative criteria and those that simply report irrelevant physical generalizations must be found. It is with the aim of articulating such a way that Foot claims that the parts, features and activities of organisms which the predicates in natural historical judgments refer to have a distinguishing feature: They are causally and teleologically related to, and contribute to life functions such as self-maintenance, defense and the obtaining of nourishment. She argues that this identification of the features referred to in natural historical judgments with those that play a part in the vital life-functions of the kind in question fills in a gap in Thompson’s account. Without this identification, we would not be able to isolate the propositions expressed in Aristotelian Categoricals from the “non-teleological attachment of predicates to a subject term that is the name of a species.”¹² For instance, we

¹² Foot, *Natural Goodness*, 30.

would not be able to differentiate between “The male peacock has a brightly coloured tail”, which is an Aristotelian Categorical expressing a natural-historical judgement (since having a brightly colored tail helps the male peacock to attract mates and reproduce) from the superficially logically similar “The blue tit has a round patch on its head”, which expresses no such judgment.¹³ Using a different example, Foot states that, in making evaluative judgments about the roots of an oak tree, we need make no reference to “the needs or wants of the members of any other species of living thing”; rather, “[t]he good of the oak is its individual and reproductive life cycle.”¹⁴ We deem sturdy and deep roots to be good for the oak because such roots contribute to its individual survival and reproductive life cycle. Generalizing from this example, Foot argues that in making judgments of natural goodness in plants and animals, we evaluate particular parts and features on the basis of whether the possession of the parts or features in question contributes to the physical flourishing of the organism. Foot calls such a conceptual pattern a pattern of natural normativity, and later goes on to argue that reasons of the same form can be employed in the moral evaluation of human actions and lives.

Taken by itself, Foot’s claim – that the organic parts, features and activities predicated by true natural historical judgments are to be identified with those that contribute to life functions such as self-maintenance, defense and the obtaining of nourishment in the organism – cannot establish that the parts, features and activities that feature in ACs are those that an organism needs to possess to be good as a member of its species or biological kind. For one thing, a particular part or feature found in an individual organism may contribute to life functions in that particular member of the biological kind even if it would not contribute to life functions in

¹³ Ibid., 30.

¹⁴ Ibid., 46.

another member of the same kind. For instance, it is possible that a particular oak tree may thrive in a particular location even though it has shallow and weak roots, due to the fortuitous fact that the soil in that location happens to be unusually rich in nutrients. This being the case, the tree is able to obtain enough nutrients to grow healthily, despite having shallow and weak roots. “The oak has shallow and weak roots” would presumably not express a true natural historical judgment, on the Foot-Thompson account. However, from what we have seen thus far, there does not seem to be any principled way for Foot and Thompson to rule that “The oak has shallow and weak roots” does not qualify as a true natural historical judgment. Foot and Thompson cannot justifiably exclude weak and shallow roots from the life form of the oak species by arguing that such roots merely contribute to life functions in the fortuitous instance of there being unusually rich soil; that, *for the most part*, having weak and shallow roots does nothing to fulfill life functions in oaks. They cannot avail themselves of such a move because, as we have seen from the foregoing, true natural historical judgments are not statistical generalizations.

If Foot and Thompson are to be able to come up with a determinate set of ACs for a particular species or biological kind, then, there needs to be a way by which they can justifiably include particular parts, features and activities (such as deep and sturdy roots) while excluding others (such as weak and shallow roots). In order to do this, some consistent explanation needs to be given of why the former set of parts, features and activities rather than the latter should properly be considered those that contribute to life functions within the organism.

Even if some such explanation can be given, however, further fundamental questions need to be addressed. One can reasonably question why fulfillment of life functions such as survival and reproduction should be relevant to the goodness of organisms as members of their biological kinds, in the first place. It would not be satisfactory to respond by saying that such fulfillment is

relevant because it contributes to the physical flourishing of the organism and to the organism's possessing natural goodness, since skeptics of Foot's Aristotelian naturalistic project would probably not be sympathetic to her claim that physical flourishing and natural goodness are relevant criteria of goodness in nonhuman organisms.

There are particular statements made by Foot that we may draw upon to address such fundamental concerns. For instance, speaking about Thompson's work on ACs, Foot states that "[h]is [Thompson's] thesis is that to understand certain distinctive ways in which we describe individual organisms, we must recognize the logical dependence of these descriptions [ACs] on the nature of the species to which the individual belongs."¹⁵ Applying this statement to the foregoing exposition of Thompson's work, we can understand Thompson to be claiming that natural historical judgments (which ACs express) are justified normative criteria for goodness in organisms of a particular species because organisms whose parts, features and activities conform with these judgments are living in such a way as to be in conformity with the nature of their species, in some sense of the term "nature." This being the case, on the Foot-Thompson view, physically-flourishing organisms whose parts, features and activities contribute to life functions such as survival and reproduction are good as members of their respective species or biological kinds because fulfillment of such functions either contributes to or is constitutive of being in conformity with this nature.

Such an appeal to the nature of the species can only raise more difficulties for Thompson's account, difficulties to which no solutions seem readily available: What sense of "nature" are Foot and Thompson operating with? Why and how are the ACs of a particular species logically

¹⁵Ibid., 27.

dependent on this nature? Why does fulfillment of life functions either contribute to or constitute this nature?

These are difficult questions to which no answers seem to be forthcoming in either Foot's or Thompson's works, to my knowledge. This lack of forthcoming answers, combined with the difficulties within Thompson's account that I highlighted earlier, show that Thompson's work on ACs is in no position to provide naturalistic criteria for goodness on Foot's view. We need to look elsewhere in order to come up with a naturalistic account of goodness in living organisms that can be employed to justify Foot's claims of natural goodness. Such an account needs to articulate naturalistic criteria that can clearly show that for an organism to be good as a member of its biological kind is for it to possess parts and features and engage in activities that fulfill life functions such as survival, reproduction and defense. Unless such criteria can be articulated, Foot's claims of natural goodness in living organisms cannot be justified.

Conclusion

If Thompson's work in ACs cannot explain why fulfillment of life functions is central to the goodness of organisms as members of their respective species, what can? Perhaps the questions to ponder here are: Are Foot's and Thompson's views of goodness in living organisms based upon a particular biological perspective of the workings of organisms? Is this perspective compatible with contemporary biology and the scientific worldview in general? If so, is it possible to articulate a set of naturalistic criteria based on such a perspective? Can such criteria establish the fulfillment of life functions as the determinant of goodness in living organisms as members of biological kinds? If the answer to all these questions is yes, then there is yet hope for justifying Foot's claims of natural goodness and rendering Foot's view of goodness in living organisms coherent. I address these questions in the next chapter, as I examine whether the work

of field biologists can provide naturalistic criteria for living organisms on the Foot-Thompson account.

CHAPTER 4
CAN THE WORKS OF FIELD BIOLOGISTS PROVIDE NATURALISTIC CRITERIA FOR
GOODNESS IN LIVING ORGANISMS?

Introduction

In this chapter, I continue the work that I began in the preceding chapter. In that chapter, I examined Foot's views of goodness in plants and animals. The work in this chapter is, however, of a markedly different tone from that in the preceding one. In that chapter, I focused primarily on providing an exposition of Foot's account of goodness in living organisms, pointing out difficulties with her account. Specifically, I drew attention to Foot's attempt to draw upon Thompson's idea of ACs to articulate naturalistic criteria for goodness in living organisms. I argued that Thompson's work is beset with substantial difficulties. As such, it is in no position to provide naturalistic criteria of goodness for Foot's view of living organisms.

My work in this chapter is more positive in nature. I begin with a brief discussion of the importance of naturalistic criteria for goodness in living organisms for Foot's project. Such a discussion shall be conducted via a brief critical summary of developments in the two preceding chapters.

I then go on briefly to consider Aristotle's account of goodness in living organisms. Since Foot's account is broadly based upon Aristotle's, looking at the latter would yield some useful insight about what characteristics her account needs to possess if it is to be considered a broadly Aristotelian account. If Foot intends ACs to furnish naturalistic criteria for goodness within a broadly Aristotelian account, these criteria she proposes must be consistent with the characteristics of such an account.

Equipped with this basic picture of the characteristics of a broadly Aristotelian account, I go on to consider both Foot's and Thompson's remarks concerning what ACs are about. In particular, I focus on Foot's remarks that ACs are concerned with "how a kind of plant or

animal, considered at a particular time and in its natural habitat, develops, sustains itself, defends itself, and reproduces.”¹ Foot holds the view that the propositions expressed by ACs are intelligible within the context of contemporary biology.² She holds that they are also intelligible independently of evolutionary theory, while not conflicting with the evolutionary perspective.³ I also draw attention to Thompson’s claim that the kind of biological perspective commonly adopted by nature documentary programs is the kind that helps us understand what ACs are about.⁴ I then go on to examine Thompson’s claim in the light of the work of field biologists, which inspires many of these nature documentaries. In particular, I draw upon the findings of zoologist and pioneering conservationist Archie Carr in his research on the nesting behavior of green turtles in order to assess the plausibility of Thompson’s claim. I argue that if the ACs of a given biological kind are based upon field biological facts about what organisms of that kind do to fulfill life-functions, such ACs cannot provide us with plausible naturalistic criteria of goodness. This is so, because it is not always the case that deviations from such purported criteria *should* constitute defects in the particular organism. In light of this, then, I argue that ACs – and the field biological perspective upon which they are based – cannot plausibly provide naturalistic criteria for goodness on Foot’s view of living organisms.

¹ Foot, *Natural Goodness*, 29.

² *Ibid.*, 29.

³ For instance, in claiming that ACs “tell of how a kind of plant or animal, considered at a particular time and in its natural habitat, develops, sustains itself, defends itself, and reproduces”, she also claims that “[i]t is only in so far as “stills” can be made from the moving picture of the evolution of species that we can have a natural history account of the life of a particular kind of living thing.” Such a metaphor indicates that she does not see the content of ACs to be in conflict with the findings of evolutionary theory, since it is only insofar as there is a moving picture that one can make “stills” of different segments of the picture. See *Ibid.*, 29.

⁴ Thompson, ‘The Representation of Life’, 280 – 1.

The Importance of Naturalistic Criteria of Goodness to Foot's Account

In the preceding chapter, we saw that if Foot is to provide us with a plausible account of goodness in living organisms – one which she can, in turn, extend to yield an account of what makes for a good human being or a good person – she needs to articulate a set of clearly defined criteria for what makes a particular organism good as a member of its biological kind. With such criteria, Foot will then be able to identify a unique set of features and parts that make the organism in question good as a member of its biological kind. These criteria need to be naturalistically explicable: They need to be explainable in terms that are compatible with contemporary biology and the scientific worldview in general. They need to be naturalistically explicable because Foot's aim is to come up with a broadly Aristotelian account of goodness in animals and plants that is compatible with contemporary science.⁵

This aim is part of her larger metaethical project of articulating a naturalistic basis upon which moral judgments can be grounded. As we saw in chapter 2, this project is based on Foot's overarching claim that we can come to better understand what is involved in making moral judgments of goodness in human actions and lives by first getting clear about what is involved in making non-moral judgments of goodness in plants and animals.⁶ In light of this, then, whether or not it is possible, on Foot's account, to articulate naturalistically explicable criteria for goodness in living organisms is central to whether her account can ultimately provide us with a better understanding of what is involved in making moral judgments of goodness. If Foot's account cannot explain what is involved in making non-moral judgments of goodness in nonhuman living organisms, it would not be able to deliver on her claim of providing us with a

⁵ *Natural Goodness*, 29.

⁶ *Ibid.*, 16.

naturalistic foundation upon which we can come to better understand moral judgments of goodness in human actions and lives. Therefore, the issue of whether or not such naturalistic criteria can be articulated has important ramifications for the overall plausibility of Foot's project.

What Makes an Aristotelian Account of Living Organisms Aristotelian? Back to Aristotle

Foot's aim, as we have seen, is to come up with a broadly Aristotelian account of goodness in animals and plants that is compatible with contemporary science. What characteristics must a broadly Aristotelian account possess? This is an important question, since these characteristics determine the parameters within which naturalistic criteria of goodness must fit if they are to be consistent with a broadly Aristotelian account. Given the nature of Foot's project, then, any criteria that purport to function as naturalistic criteria of goodness for living organisms within her account must be (1) intelligible within the context of contemporary biology and science in general, and (2) consistent with the characteristics of a broadly Aristotelian account, whatever these may be. In order for us to be in a position to determine whether Foot is successful in articulating such criteria, then, we first need to know what characteristics an account must have in order to qualify as broadly Aristotelian.

We can get some insight into what these characteristics are by looking briefly at Aristotle's account of goodness in living organisms.⁷ As I explained in chapter 2, it is possible to understand Aristotle to be subscribing to a functional view of goodness in living organisms. On such a view, each biological kind has a particular form (*eidos*) associated with it. This form can, in turn, be spelled out in terms of a set of life functions. As such, the form constitutes a determinate

⁷ The following exposition of Aristotle's view of goodness in living organisms would not be possible without the insightful knowledge about this area of Aristotle that I have been fortunate enough to acquire through attending John Palmer's seminars in Aristotle in the department of philosophy at the University of Florida in Fall 2002 and Spring 2006.

criterion of goodness for an organism as a member of the kind: An individual organism is deemed to be good as a member of the kind if it possess parts and features and engages in activities that fulfill these life functions.⁸

How do the parts and features in an individual organism come to fulfill these life functions and actualize the form associated with the biological kind, on Aristotle's picture? On Aristotle's view, in order for the parts or features of an organism to fulfill these life functions and actualize the particular form, a certain process needs to take place within the organism. Such a process is characterized by the organization of initially unorganized matter into a complex, clearly defined structure. (*Physics* 193b7-12) In order for such a process to take place, Aristotle argues, it must be the case that the highly organized form which is actualized at the end of the process was already potentially present within the unorganized matter at the beginning of the process.

(*Physics* 193b7-12) One prominent example of his explanation of such a process in these terms is found in his explanation of what goes on in human reproduction:

It is clear that there is something that makes the parts of the embryo, but this does not exist as a definite individual, nor does it exist in the semen at first already perfect. But how does each part arise?... whatever arises by nature or by art arises by something *actually* existing out of that which is *potentially* such a being. (*Generation of Animals* 734b17 – 22)

That is, Aristotle is saying, a fertilized embryo is essentially an amorphous, undifferentiated cellular mass, one which develops into a human infant through a gradual process of differentiation of parts. What causes this process to unfold? One might respond by saying that it is caused by the act of sexual reproduction which took place between the parents. On Aristotle's picture, however, the sexual act is merely the efficient cause which sets the process in motion.

(*Physics* 194b30 –2) Something more is needed in order to fully explain why and how this

⁸ A detailed account of such a functional interpretation of Aristotle's view of goodness in living organisms can be found in *Aristotle: Selections*, tr. Terence Irwin and Gail Fine, xvii – xix.

process unfolds: After all, if one or both of the parents had been infertile, no such process would have taken place. Aristotle thinks that a full explanation of the process can be found only by looking at the nature of the fertilized embryo. For Aristotle, the fertilized embryo is potentially a fully actualized human infant. (*Physics* 194a28-9)⁹ As such, it is not merely an amorphous cellular mass, since not just any amorphous cellular mass has the capacity to develop into an infant. The embryo is able, under the right conditions, to develop into a human infant because the parents have imparted the human form to the embryo. (*Physics* 202a9-12) This being the case, the form exists in a potential state in the embryo. In such a state, it serves as the organizing principle in accordance with which the subsequent differentiation of parts unfolds in the embryo, culminating in the actualization of the human form in the fully developed human infant. (*Physics* 202a9-12)¹⁰

Aristotle's explanation of human embryonic development is just one part of his cosmological worldview. On this view, every process that occurs in the parts, features and activities of every individual thing in the natural world – this also includes man-made artifacts such as knives – can be explained in terms of actualization (or, in the case of mutations, non-actualization) of a particular form (*eidos*). (*Physics* 199a7-b32) In the case of living organisms, in particular, Aristotle holds that for any living organism belonging to a particular biological kind, there is a unique form for that kind. (*Physics* 199a7-b32) Actualization of this form

⁹ A discussion of the process that characterizes this change from the form's being potentially present in an organism to its being actualized within the fully developed organism can be found in Jonathan Lear, *Aristotle: the desire to understand* (Cambridge: Cambridge University Press, 1988), 19 – 20.

¹⁰ Elaborating on the role that form plays in biological processes, Lear argues that, strictly speaking, on Aristotle's picture, the efficient cause and the organizing principle are not two different things, but are really just "different aspects of form itself." This is the case because the parent must already possess the form in order to be able to impart it to the embryo through the reproductive act. Once imparted, the form serves as the organizing principle in accordance with which the subsequent differentiation of parts unfolds in the embryo. Thus, efficient cause and organizing principle are two different aspects of form, insofar as they can be seen to be two different phases through which a particular form comes to be actualized in the natural world. See *Ibid.*, 27 – 35.

constitutes the final goal towards which all processes of development, sustenance, defense and reproduction in the organism should properly culminate; any process that deviates from this form is deemed a monstrosity or mutation.¹¹

Being the final goal towards which all life functions of development, sustenance, defense and reproduction should properly culminate, actualization of the form for the particular biological kind also constitutes the criterion for judging whether a particular organism is good as a member of its biological kind. (*Physics* 199a7-b32) To the extent that the functioning of its parts, features and activities either contribute to or are constitutive of actualizing this form, the organism in question is deemed to be good as a member of the particular kind. (*Physics* 199a7-b32)

In light of the above, we can see how Aristotle's account of goodness in living organisms can be understood to be a functional account of goodness. For a particular organism belonging to a particular biological kind, there is a form specific to that kind, and the various parts, features and activities of that organism must function in such a way as to actualize this form if the organism is to be good as a member of that kind. The cosmological worldview which informs Aristotle's account specifies what the form unique to the biological kind is, and also specifies the functions which individual parts, features and activities must fulfill in order to actualize that form. It is not within the scope of this dissertation to go into an exposition or analysis of what such a cosmological worldview exactly amounts to. It would suffice, for our purposes, to note that such a worldview furnishes the background story which makes it intelligible for Aristotle to hold that various parts, features and activities in an organism must function in particular ways if they are to contribute to or be constitutive of meeting a specific criterion of goodness (i.e. the

¹¹ A discussion of what constitutes mutations in Aristotle's view of living organisms can be found at *Ibid.*, 36 – 42.

realization of the form of the particular biological kind) for an organism belonging to that biological kind.

ACs Reconsidered: Can ACs be Plausibly Based on the Perspective of Field Biology?

The worldview which informs Aristotle's account of goodness in living organisms, is, however, quite incompatible with contemporary biology and science in general. At the very least, there does not seem to be a straightforward way of fitting Aristotle's conception of form within the contemporary scientific worldview. This being the case, the defender of an Aristotelian account like Foot's cannot, on pain of being dismissed as unscientific, incorporate wholesale Aristotle's view of goodness in living organisms into her account.

Even so, however, we can see from the foregoing exposition of Aristotle's account that Foot's account is clearly Aristotelian in a significant respect. On Aristotle's view, for an organism to be good as a member of a biological kind is for it to possess parts and features and engage in activities that either contribute to or constitute actualizing the form of the kind. The parts, features and activities of an organism, in turn, actualize the form in question if they operate in such a way as to fulfill the particular life functions that constitute the form. In my exposition of Foot's account of goodness in living organisms in the preceding chapter, we saw that, on her account, for a plant or animal to be good as a member of a particular biological kind is for it to possess what she terms *natural goodness*. We also saw that, if an organism is to possess natural goodness, it needs to possess parts and features and engage in activities that contribute to the physical flourishing of the organism by fulfilling particular life functions within the organism. Insofar as the fulfillment of these life functions is central to determining whether an organism is good as a member of its biological kind, Foot can be seen to be subscribing to a functional view of goodness in living organisms. It is in this way that we can understand Foot's view of goodness in living organisms to be an Aristotelian one.

If such a view of goodness in living organisms is to be substantiated, Foot needs to articulate a set of naturalistic criteria which can enable us to identify the parts, features and activities that should properly be considered those that fulfill life functions within the organism. As we saw in the preceding chapter, Foot draws upon Thompson's work on ACs in order to articulate such naturalistic criteria for goodness in living organisms. As we saw, ACs are sentences which express particular propositions about one or another biological kind. Thompson believes that, for any given biological kind, a set of ACs are true of the kind. He also believes that the truth of such sentences depends on the nature of the kind in question. As we also saw, ACs are typically sentences of the form "The S is (or has, or does) F," where 'S' holds a place for the name of a biological kind and 'F' holds a place for a predicate. An example of such a statement would be "The cat has four legs."

If ACs are to express viable naturalistic criteria for goodness in Foot's account, there has to be a non-mysterious way of spelling out what they are about, in a way that is compatible with contemporary biology. Exactly how this is to be done is not immediately apparent. To begin with, as we saw in the preceding chapter, ACs are somewhat peculiar, in that it is hard to pinpoint the logical form of the propositions expressed by such sentences as "The cat has four legs." "The cat has four legs" clearly does not refer to an individual cat, since it is supposed to express a certain feature that is found in members of the biological kind in general. Nor does it predicate something of every member of the kind, since there are clearly three-legged cats. One might perhaps think it more promising to suppose that "The cat" refers specifically to the biological kind in question, so that the sentence might be taken to predicate something that is true of members of the kind in general. If this is true, then something like "For the most part, S's are Fs" would aptly capture what is asserted by such sentences. According to Thompson,

however, “The mayfly breeds shortly before dying” constitutes a true AC, even though most mayflies in their natural habitat actually die long before breeding. Thompson, then, does not intend ACs to express physical generalizations about members of a biological kind.

In light of these considerations, it might be fruitful to understand the propositions expressed by ACs as not having the logical form of conventional logically quantified propositions. In line with Foot’s and Thompson’s intentions of employing ACs to predicate things that are in some way dependent on the nature of the biological kind to which the organism belongs, it might be more fruitful to understand ACs to be expressing some kind of defeasible generalization: On such an understanding, “The cat has four legs” is really shorthand for “It is in the nature of members of the biological kind, cat, to have four legs.”¹²

If ACs are to be properly understood to express defeasible generalizations, then it would make sense to ask: What notion of “nature” can make it such that it remains true to say, for instance, that cats have four legs, even if there were to be no four-legged cats remaining in the actual world? If Foot and Thompson are to be able to state truly that it is in the nature of members of particular kinds to possess certain parts or features rather than others, or engage in certain activities rather than others, their statements must be grounded in a specific biological perspective, one which is intelligible within the context of contemporary biology and science in general.

¹² Recent work on defeasible generalizations has been done by Mark Lance and Margaret Little. Lance and Little argue that when we put forth such defeasible, exception-laden generalizations in our everyday lives, “what we really want to say is not that such a connection always, or even usually, holds, but that the conditions in which it does hold are particularly revealing of that item’s nature... we are taking as *privileged*, in one way or another, cases in which the item has the feature specified.” See Mark Lance and Margaret Little, ‘Defeasibility and the Normative Grasp of Context’, *Erkenntnis*, 61(2-3), Nov. 2004, 435 – 55.

In addition to being intelligible within the context of contemporary biology and science in general, there are further parameters that such a biological perspective must fit within. For instance, Foot remarks that

[t]he history of a species is not... the subject with which Aristotelian Categoricals deal. Their truth is truth about a species at a given historical time, and it is only the relative stability of at least the most general features of the different species of living things that makes these propositions possible at all. They tell of how a kind of plant or animal, considered at a particular time and in its natural habitat, develops, sustains itself, defends itself, and reproduces. It is only in so far as 'stills' can be made from the moving picture of the evolution of species that we can have a natural history account of the life of a particular kind of living thing.¹³

If ACs are not concerned with the evolutionary history of the biological kind, but, rather, "tell of how a kind of plant or animal... develops, sustains itself, defends itself, and reproduces" at a particular point in evolutionary time, then the biological perspective upon which ACs are based must be one that is true independently of facts about a given biological kind's evolutionary history. At the same time, this perspective, while ahistorical, must also be one that does not conflict with the evolutionary perspective, since the general tone of both Foot's and Thompson's works suggest that, while they intend their project to be ahistorical in nature, they do not deny the validity of evolutionary history.

In addition to Foot's negative remarks about what such a biological perspective is not about, Thompson also offers positive suggestions as to what this perspective is about. He suggests that such a perspective is the kind commonly adopted by nature documentary programs on public television. For instance, he remarks that:

The voice-overs on public television nature programmes are characterized by propositions in the sort of 'mood' I am intending. We will see film footage depicting some particular bobcats, taken perhaps in the spring of 1977; the voice-over will include verbs and other predicates which were verified, as the film shows, in the activities, parts, and environment of the featured, or starring, individual bobcats... It sounds like this: 'When springtime

¹³ Foot, *Natural Goodness*, 29.

comes, and the snow begins to melt, the female bobcat gives birth to two to four cubs. The mother nurses them for several weeks.... As the heat of summer approaches, the cubs will learn to hunt.’¹⁴

The propositions expressed in the nature program do not conflict with evolutionary biology. Indeed, the evolutionary biologist could very well use these propositions as starting points in an exposition of the evolutionary history of the bobcat species. She could, for instance, begin by explaining how natural selection results in the female bobcat’s giving birth to two to four cubs at a time, and not any more or less than that. At the same time, the truth of these propositions can be verified without appealing to evolutionary biology. It is not hard to imagine how, in the ages before the advent of evolutionary theory (and even in the present age), field biologists and naturalists would spend enormous amounts of time in the natural habitats of animals and plants, laboriously recording and accumulating observations about how these organisms fulfill various life functions in these habitats – observations that are expressed in a mood similar to that of a television nature program.

If the biological perspective featured in the works of field biologists furnish an adequate account of how organisms fulfill various life functions in their natural habitats at a particular point in evolutionary time, then it might seem that we could straightforwardly conclude that such a biological perspective is the one upon which ACs are based. Unfortunately for Foot and Thompson, however, things are not quite so straightforward. The works of field biologists suggest that, without appealing to the evolutionary history of the species, the parts, features and activities displayed by many organisms in their natural habitats often seem very ill-fitted for fulfilling the life-functions of development, sustenance, defense and reproduction. In his research on the nesting behavior of green turtles in their nesting ground on Tortuguero beach in Costa

¹⁴ Thompson, *op. cit.*, 280.

Rica, zoologist and pioneering conservationist Archie Carr relates in great detail the enormous difficulties faced by the female green turtle when she comes ashore to lay her eggs:

At breeding time, when survival is in most delicate balance, all sea turtles leave the familiar safety of the sea, where they have grown to a size that makes them almost immune to predation, and lumber ashore and expose themselves and their offspring to the hazards of the land. A green turtle on shore is almost defenseless. She weighs on the average nearly three hundred pounds but seems almost wholly unable to use her bulk and strength in active self-defense. She is awkward of gait, myopic of vision, and single-track of mind. Once the nesting has started, she will go on doggedly through the hour-long ceremony with a pack of dogs digging out her nest beneath her, or with drunken Indians drumming on her back. It is as if she were sure that this last legacy to her race must be left, whatever her own fate might be.¹⁵

Moreover, the perils faced by the green turtle race on shore do not end with the mother turtle.

After she lays and nests her eggs, the mother turtle returns to the ocean. The eggs left behind by her, and the hatchlings that subsequently emerge from them, are subject to dangers that are just as great, if not greater than those she faces. Turning his attention to the many animals that prey on green turtle eggs and hatchlings, Carr continues by noting that:

[t]he most important nonhuman predators [of green turtle eggs] on the beach are dogs and buzzards. The dogs are the worst. They move in on a laying female and take the eggs as they are laid or prevent her from covering them. They are stronger at digging than buzzards are, too, though buzzards dig better than many people might imagine.... The other regular turtle eaters on the beach are opossums; the few domestic pigs that range the northern-most miles; and... the ravening hosts of wari, or white-lipped peccaries. These sometimes travel out to the beach from the inland forest at nesting time and hatching time. This is of course a catastrophe, especially if it happens in early October when in hundreds of nests the little turtles rest in tight bundles in little cavities only an inch or less beneath the surface, waiting for the time that seems to them proper for bursting out into the unknown world.¹⁶

In light of all the above dangers faced by the female green turtle in laying and nesting her eggs and those faced by hatchlings in emerging from their nests, it would seem natural for a reader of such a field biological account to conclude that the parts, features and activities of green turtles

¹⁵ Archie Carr, *The Sea Turtle: So Excellent a Fishe* (Austin: University of Texas Press, 1986), 13.

¹⁶ *Ibid.*, 75.

in their natural habitats are not as effective as they could be at fulfilling life functions. It is in this vein that Carr goes on to remark that, in light of all this,

[i]t seems to a human observer a foolhardy violation of common sense to leave your young ones far back from the sea on the hungry shore, behind dunes or debris which (the chances are) cut off the way to the sea and hide it from view. The little turtles come out into a world anxious to eat them.¹⁷

If Foot and Thompson are looking to field biological accounts such as Carr's to furnish naturalistic criteria of goodness for the parts, features and activities of living organisms, they seem to face a problem here. If Carr's foregoing account of what green turtles do in their natural habitats to fulfill life functions is accurate, then we will have to conclude that the parts and features possessed by green turtles in their natural habitats, and the activities they undertake are not always those that are or would be the most efficient for fulfilling life functions. Indeed, reflecting on the enormous trials and tribulations faced by the green turtle egg and the hatchling that emerges from it, Carr muses:

When you think of the unpromising future that confronts a turtle egg and the turtle hatchling that comes out of it, you wonder why sea turtles don't give up their stubborn, reckless old way of leaving their new generation on shore, and instead carry one big, well-tended egg in a pouch or release myriads of turtle larvae to join the plankton, and swamp the laws of chance with teeming millions of largely expendable progeny.¹⁸

Foot and Thompson could respond to such concerns about the lack of effectiveness of the parts, features and activities of green turtles in their natural habitats in fulfilling life functions by arguing that the parts, features and activities described by ACs do not have to be those that are particularly effective at fulfilling life functions, in the first place. ACs about a particular biological kind, they could be seen to argue, tell us what parts, features and activities are displayed by a member of the kind, given the nature of members of such a kind. It could very

¹⁷ Ibid., 76.

¹⁸ Ibid., 73 – 4.

well be that it is in the nature of members of the particular kind to possess parts and features and undertake activities that are not particularly effective at fulfilling life functions. Thus, they could be seen to argue, it is in the nature of female members of the green turtle kind to come onshore to lay eggs and to lay their eggs far from the sea, even though such activities are not particularly effective at fulfilling the reproductive function. This being the case, then, two ACs pertaining to the green turtle kind would be

(C1) The female green turtle comes onshore to lay her eggs.

(C2) The female green turtle lays her eggs far back from the sea.

The problem arises when we try to employ (C1) and (C2) as naturalistic criteria for goodness in green turtles. If (C1) and (C2) are naturalistic criteria for evaluating whether individual green turtles are good as members of the green turtle kind, any part, feature or activity in an individual green turtle that constituted a deviation from (C1) or (C2) would be deemed a defect in that individual. Suppose that there is an unusual female green turtle that does not come on shore to lay and nest her eggs, but, instead, has somehow developed the necessary reproductive capability to carry one baby turtle to term at a time in a womb. Our commonsense intuitions would incline us to say that this particular turtle possesses a feature that is particularly effective at fulfilling the reproductive function; at any rate, it definitely fares better in this respect than the onshore laying practices of her contemporaries. It might even turn out that natural selection will come to favor this particular feature, and that, over the course of millions of years, female green turtles with wombs will come to be the standard adaptation in the green turtle species. Unfortunately, there does not seem to be any principled way for Foot and Thompson to include this feature in the ACs of the green turtle species, since these ACs only tell of how members of the species fulfill life functions at a particular point in evolutionary time. Indeed, as we can conclude from the foregoing, on the Foot-Thompson account, this unusual womb-bearing female turtle would be

deemed a defective member of the kind, even if she is reproductively more efficient than other members of the kind.

Conclusion

The problem for Foot and Thompson, then, is that it is not clear why a particular deviation in a particular organism from field biological facts about what members of the particular biological kind do to fulfill life functions in their natural habitats should constitute a defect in that organism, especially if the deviation in question causes the organism to fulfill life functions more effectively than other members of the kind.

This being the case, then, field biological works cannot by themselves furnish a credible perspective upon which to base ACs. At the very least, an argument needs to be given for why fulfillment of life functions should be the deciding factor in evaluating whether a particular organism is good as a member of the kind, and why the presence in the organism of parts, features and activities which contribute to such fulfillment is decisive of whether the organism is good as a member of the kind. Without some such argument, ACs cannot be justified naturalistic criteria for goodness in living organisms on the Foot-Thompson account. It is with the aim of formulating such an argument that we turn, in the next chapter, to recent work done by philosophers of science in the area of functional analysis and explanation. We consider this work in order to come up with a functional argument to show that the fulfillment of life-functions constitutes the proper functions of parts, features and activities in an organism, and that an organism is good as a member of its biological kind when its parts, features and activities fulfill these functions.

CHAPTER 5
A FUNCTIONAL ACCOUNT OF FOOT'S VIEW OF GOODNESS IN LIVING ORGANISMS

Introduction

In this chapter, I outline a functional account of Foot's view of goodness in living organisms, one that is grounded in field biology. My aim is to show that such an account provides naturalistic criteria for goodness in living organisms that are at least initially credible, in a way that seems to accord with her view. I also argue that Foot's view, understood in terms of such an account, can hold its own in the face of challenges posed by evolutionary functional accounts of living organisms.

In the preceding chapter, I demonstrated that the findings of field biologists cannot by themselves furnish a credible perspective upon which to base naturalistic criteria of goodness in the way required by Foot's view of the good of living organisms. This is so despite Michael Thompson's claim that such criteria are based on the kind of biological perspective adopted by field biologists.

In this chapter, I draw upon work done by Larry Wright in functional analysis and explanation to formulate a functional account of the workings of living organisms based on the perspective of field biology. I argue that such an account is largely consistent with Foot's view and can be employed to effectively defend her view against recent challenges by philosophers who, like William Fitzpatrick,¹ argue that Foot's Aristotelian view is seriously undermined in the face of evolutionary considerations.

I make the case for my account in several stages. I begin the first part of this chapter by briefly explaining my reasons for favoring a functional account of Foot's view. As I explained in chapter 2, Foot claims that, for the most part, criteria for goodness in inanimate objects can be explicated in functional terms. She claims that this is so because, for the most part, when we

make evaluations of goodness in inanimate objects, we evaluate them as members of functional kinds. I also explained how she does not go beyond making these broad claims to articulate such functional criteria of goodness for inanimate objects. It is with the aim of filling such a gap in her account that, in the first part of this chapter, I show how *articulating* a functional account of Foot's view of goodness in inanimate objects can serve to articulate Foot's views in this area. This first part of the chapter is also intended to set the stage for a broader understanding of how functional analysis can be applied to Foot's view of living organisms. As I shall show, the general features of Wright's functional characterization can be applied to Foot's views of both living organisms and inanimate objects. In the second part of the chapter, I go on to outline and defend a functional account of Foot's view of goodness in living organisms, based on the perspective of field biology. In the third part, I briefly outline Fitzpatrick's evolutionary functional account. I also explain how his account poses a fundamental challenge to Foot's view, and to my functional account of her view. In the final part, I compare Fitzpatrick's account with my field biological account. I argue that, on both scientific and functional grounds, Fitzpatrick's account does not undermine the credibility of my account. Although the evolutionary perspective provides an indispensable unified picture of the workings of organisms, field biology provides a different perspective of their workings, one that adds to our knowledge of living organisms. As I shall show in what follows, field biology (and Foot's view of living organisms, which is based on it) provides us with an informative and independently illuminating account of what the proper functions of parts, features and activities are in organisms. Being both consistent with and distinct from evolutionary accounts like Fitzpatrick's, such an account is valuable in enhancing our understanding of the workings of living organisms.

Why Formulate a Functional Account of Foot's View?

There are several factors motivating this move. First, as we saw in chapter 2, in laying out her views on goodness in inanimate objects, Foot claims that, in most cases, we cannot intelligibly speak of an object's being good simpliciter. If an object is "good", she claims, it has to be good as a member of some functional kind or other in most cases. She does not, however, go on to articulate an account of what it would be for objects to be good as members of functional kinds. A functional account that is consistent with Foot's views on inanimate objects would have the advantage of spelling out her views in this area. Secondly, with regard to Foot's view of goodness in living organisms, although field biology by itself cannot do the work of spelling out clear naturalistic criteria of goodness in living organisms, perhaps a functional account of living organisms based on field biology will prove successful in articulating such criteria. As I shall show in what follows, such an account looks promising, not least because it shows that Foot's view of living organisms, if articulated in terms of such an account, can hold its own in the face of challenges from evolutionary accounts of the workings of organisms. Finally, if Foot's views of goodness in both inanimate objects and living organisms can be credibly interpreted in functional terms, this would confer a certain unity and harmony to her view of goodness as a whole.

A Functional Account of Foot's View of Goodness, Applied to Inanimate Objects

In chapter 2, we looked at Foot's view of goodness, applied to inanimate objects. With regard to inanimate objects, Foot's view is that in most contexts, "good" ascribes a two-place relation rather than a monadic property. She claims that, in most cases, to call an inanimate object "good" is to ascribe a natural relation. When we say that this thing is good, we are really

saying in most cases that this object is *good as* a member of some functional kind or other.¹ This is so, she claims, because in most cases in which we attribute goodness to inanimate objects, we attribute goodness to them as members of functional kinds, and “[w]here a thing has a function the primary... criterion for the goodness of that thing will be that it fulfills its function well.”²

There are two things we can infer from the foregoing. The first is that, on Foot’s view, it is unintelligible, in most contexts, to speak of an inanimate object’s being good simpliciter. In most contexts, in order to even begin to understand what ~~it is that~~ we mean when we say that something is “good”, we need to know whether we are speaking of this object’s being *good as* a knife, *good as* a crowbar, or *good as* a member of some other functional kind. The second is that, on Foot’s view, whether or not something is good as a member of a functional kind is determined primarily by whether or not “it fulfills its function well.”

What would be required, on Foot’s view, for an inanimate object to “fulfill its function well” as a member of a functional kind? Whether or not a satisfactory answer to this question can be found is key to determining the credibility of Foot’s view of goodness in inanimate objects. Actually, before we can answer this question, we need to pose (and answer) another question: How do we ascertain which functional kind/s an object properly belongs to? If we cannot ascertain this, we will not be able to determine what the functions are that the object needs to fulfill, much less determine whether or not it is fulfilling its functions well.

¹ In holding this, Foot is allowing that there can be cases of attributions of goodness to objects which do not involve evaluations as members of functional kinds. She does not mention such instances of non-functional attributions of goodness because they are not central to her view. David Copp, for instance, has observed that if we say that this is a good day, we may be saying that this is a good day with regard to some particular interests or purposes that we may have, but in saying this, we are not evaluating an object as a member of a functional kind, *day*. John Palmer has also made similar observations in informal discussions.

² Foot, “Goodness and Choice”, 132.

Unfortunately, Foot's explicit remarks concerning these questions are not very helpful. She states that, if an object is to be good as, say, a knife, there are certain "relevant characteristics" of "the right kind" that it needs to possess. Such characteristics, whatever they might be, are not characteristics that are determined by "facts about the speaker's choices." Rather, she continues,

No matter what he may do in the way of choosing knives which are M he cannot say 'M knives are good knives' unless M is a relevant characteristic, or unless he is prepared to show that M knives are also N knives, and N is a characteristic of the right kind.³

These remarks are not very helpful, because she does not go on to articulate criteria for identifying which relevant characteristics are "of the right kind."

In what follows, I draw upon work done by Larry Wright in the area of functional analysis and explanation in order to spell out more fully Foot's view of goodness in inanimate objects. Specifically, I do this by drawing upon this work to outline an account of what I call the *proper functions* of an inanimate object.⁴ Although such an account has not been explicitly formulated by Foot, I believe that it is consistent with her views, and that it can be fruitfully integrated into her view of goodness in inanimate objects.

Thus far, we can see that, on Foot's view, it is central to an object's being good as a member of a functional kind that it possesses particular characteristics or properties that enable it to adequately fulfill particular function/s determined by the functional kind in question. For instance, it is central to a particular object's being good as a steak knife that it possesses a sharp blade, which enables it to fulfill the function of cutting meat. The function of cutting meat is one

³ Ibid., 133.

⁴ It is only proper that I acknowledge that I am far from being the first to employ the term "proper function" in formulating a functional account of inanimate objects or living organisms. The notion of a "proper function" is central to the work of Ruth Millikan, but I define the term differently from the way she defines it. For more details, see footnote 8 below. For more details on Millikan's work on proper functions, see Ruth Millikan, 'In Defense of Proper Functions', *Philosophy of Science*, vol., 56 no. 2 (June 1989), 288 – 302.

that is determined by the functional kind, steak knife. We can also say that cutting meat is the *proper function* of an object that belongs to the functional kind, steak knife.

This is admittedly a rather rough-and-ready illustration of what I mean by *proper function*. A fuller explanation of this notion is needed. Perhaps it is useful to begin by explaining what a *proper function* is not. There are functions that the same object may fulfill, which are not the proper functions of objects belonging to the functional kind, steak knife. The object, for instance, may also function as a crowbar, or as a paperweight. Even though it might perform well in prying open crates or weighing down papers, however, we would still not say that prying open crates or weighing down papers are *proper functions* of the object, insofar as the object was not designed to function as a crowbar or paperweight.⁵

This brings up a further question: What determines that the proper functions of a particular object are to be those associated with the functional kind, steak knife, rather than those associated with the functional kind, crowbar, or the functional kind, paperweight? With artifacts, the answer to this question might seem obvious, on one level: The proper functions of this object are to be those associated with the functional kind, steak knife, because it was designed to fulfill the functions determined by this functional kind. On another level, however, appealing to design cannot by itself fundamentally answer the question of why the proper functions of this object are to be those associated with the functional kind, steak knife, rather than any other functional kind.

⁵ Such a distinction between what I call an object's *proper function* and what it may *function as* has also been brought up in recent work in functional explanation, albeit with different terminology. For instance, Colin Allen and Marc Bekoff state, "not everything that has a function is designed (for that function)... A rock on a desk may function as a paperweight, but unless the rock has had a flat base chiseled into it, or other similar modification, it is not appropriate to say that this object was designed for the purpose of holding down papers." See Colin Allen and Marc Bekoff, 'Biological Function, Adaptation, and Natural Design', *Philosophy of Science*, vol., 62, no. 4 (December 1995), 614. My intention in putting forth my conception of a proper function is not merely to introduce new terminology. Rather, as will be apparent later in this chapter, I employ this conception to construct a non-causal-historical functional account of the workings of living organisms, one that represents a view of living organisms different from that represented by causal-historical accounts, which are based on the evolutionary history of the organism.

That this is so becomes clear when we consider that one can respond to this appeal to design by raising yet another question: Why do we consider design to be a relevant factor in determining the proper function/s of a particular category of inanimate objects, i.e. artifacts?

That this last question can be pertinently raised suggests that in order to make sense of functional explanations in inanimate objects, we need some more generic way of characterizing such explanations. Such a characterization must be capable of elucidating what is going on when we make functional attributions in artifacts (and, in the process, explain why design is a relevant factor in such attributions), and it must also explicate what is going on when we make functional attributions in inanimate objects that are not artifacts.

Issues of this sort feature prominently in the work done in recent decades by philosophers of science in the area of functional analysis and explanation, especially on the idea of a functional system. Larry Wright, in particular, argues that, under appropriate conditions, the characteristics and properties of a given object, together with particular consequences that such characteristics or properties bring about, constitute a functional system. Within the context of such a system, it is possible to infer the proper functions of these properties and characteristics – and, by extension, the proper functions of the object as a whole – from the presence of these particular consequences, and vice versa. Wright also argues, further, that this kind of functional explanation can also be applied to explain the workings of parts, features and activities in living organisms, under appropriate conditions that allow us to construe living organisms as functional systems.

Wright suggests that, with respect to a particular functional system, the proper function, Z, of a particular part, feature, activity, characteristic or property, X, in a particular kind of organism or inanimate object can be characterized as follows:

(F): The function of X is Z iff:

- (i) Z is a consequence (result) of X's being there,
- (ii) X is there because it does (results in) Z.⁶

Although Wright does not use the term “proper function” in (F), his use of “function” in (F) refers to the same concept that I refer to with the term “proper function.” For instance, in arguing for (F), he makes a distinction between a particular consequence's being the *function* of a part, feature or property in an object and another consequence's being merely something that the part, feature or property is *good for*. For instance, the vinyl cover on the playing field may be good for making puddles for the kids to play in, but that is not its function, since its function is to keep the rain off.⁷ In light of this, for our purposes, we can reformulate (F) as:

(F_p): The proper function of X in an object or organism O is Z iff:

- (i) Z is a consequence (result) of X's being there in O,
- (ii) X is there in O because it does (results in) Z.

As **(F_p)** indicates, we can characterize something's being a proper function in terms of a feedback loop. (i) states that if Z is to be the proper function of X in O, Z must result from X's being present in O. (ii) states the other condition that must be satisfied for Z to be a proper function. If Z is to be the proper function of X in O, it must be true that X is present in O because it brings about Z.⁸

⁶ Larry Wright, *Teleological Explanations* (Berkeley: University of California Press, 1976), 81.

⁷ *Ibid.*, 80. I have chosen to use “proper function” in place of Wright's “function”, in order to avoid any confusion or ambiguity that may arise between the noun and verb forms of the word “function.” For instance, Wright observes that “The sweep hand of my watch may function as a dust brush, but that is not its function.”

⁸ As I mentioned in footnote 4 above, my account of proper functions differs from Ruth Millikan's. Arguing for a causal-historical account of proper functions, she states that, “[e]asy cases of items having proper functions are body organs and instinctive behaviors. A proper function of such an organ or behavior is... a function that its ancestors have performed that has helped account for proliferation of the genes responsible for it, hence helped account for its own existence... the definition of “proper function” covers, univocally, the functions of many other items as well, including the functions of learned behaviors, reasoned behaviors, customs, language devices such as words and

Condition (ii) is satisfied differently in artifacts, in inanimate objects that are not artifacts, and in living organisms. With each of these three kinds of things, there is a story that can be told, one that explains how it is true that X is there in O because it does Z. With regard to an artifact like a steak knife, for instance, if we were to ask how it could be true that the sharp blade is present in it because it cuts meat well, the story would be something like, “whoever designed the knife made the blade sharp because sharp blades cut meat well.”

Thus, there is a story implicit in Wright’s definition, one that explains how it is true that a particular type of characteristic or property is present in an artifact because it results in a particular type of consequence. We can call this the *background story*. We consider design to be a relevant factor in determining proper functions in an artifact because the process of design plays a key role in the background story: It explains how it could be true that particular characteristics or properties are present in the artifact because they bring about particular consequences.⁹

With living organisms, a different kind of background story has to be told in order to satisfy condition (ii), since we cannot plausibly appeal to any kind of story about intentional design if we are to have an account of proper functions in living organisms that is compatible with the contemporary scientific worldview. Wright, among others, argues that the evolutionary

syntactic forms, and artifacts.” See Ruth Millikan, ‘In Defense of Proper Functions’, 289. I have chosen not to adopt Millikan’s definition of a proper function because, unlike Millikan, I am arguing for a non-causal-historical account of proper functions in living organisms, as will be apparent in the next section.

⁹ Although I arrived at and formulated this conception of a background story independently, recent work in functional analysis has vindicated the central role played by the background story in functional attributions that seek to characterize proper functions in terms of a causal feedback loop obtaining between the purported function and the presence in the object or organism of the property or characteristic in question. For instance, in a recent paper, Robert Cummins argues that, “[i]f having a function is to explain why a thing, or type of thing, exists, then there must be some background story about a mechanism or process that produces the items in question, and produces them because of their functions.” See Robert Cummins, ‘Neo-Teleology’, in Andre Ariew, Robert Cummins, and Mark Perlman (eds.), *Functions: New Essays in the Philosophy of Psychology and Biology* (Oxford: Oxford University Press, 2002), 159.

history of the organism furnishes an appropriate background story that explains how it is true that a particular part, feature or activity is present in an organism because it brings about a particular consequence. As we shall see in the next section, many other proponents of functional explanations in living organisms, including William Fitzpatrick, follow Wright in putting forth functional accounts of living organisms informed by the evolutionary history of the organism. In the face of such accounts, I argue that the evolutionary historical perspective is not the only credible scientific perspective upon which to base a functional account of the workings of living organisms. I undertake such an argument in the next section. In the meantime, I shall return to the task at hand, that of articulating a functional account of Foot's view of goodness in inanimate objects.

In any characterization of proper functions in inanimate objects, the background story explaining how condition (ii) in (F_p) is satisfied plays an integral role in establishing the proper function/s of an object. With artifacts, the background story involves design; particular properties or characteristics are present in the artifact because the designer included them in the artifact in order to bring about the particular consequences in question. Seen in this light, accumulating rust cannot properly be regarded as the proper function of the sharp metal blade in the steak knife, because the designer did not include the blade in order to accumulate rust.¹⁰ By the same token, prying open crates and weighing down papers also cannot properly be regarded as the proper functions of the steak knife – even if the knife happens to do a very good job of prying open

¹⁰ David Copp has pointed out that it is quite possible that a perverse steak-knife-designer might include the blade in the knife in order to accumulate rust because he likes the look of a rusty blade. This is certainly a possibility, but it must be noted that, in such a case, the artifact in question would arguably not belong to the functional kind, steak knife, if it belongs to any functional kind, since an entirely differently background story would now apply to it. Perhaps it would belong to the functional kind, perversely-designed-knife, and accumulating rust would be the proper function of an artifact belonging to this kind.

crates or weighing down papers – because the designer did not design the knife to bring about these consequences.

This is not to say that a particular object cannot simultaneously have proper functions associated with more than one functional kind, or that the proper functions of an object cannot change over time. It is possible to describe a Swiss Army Knife, for instance, as simultaneously having the proper functions of the functional kinds, knife, screw-driver, and can-opener, among others. Perhaps one might argue that “Swiss Army Knife” denotes a unique functional kind by itself, or that “Swiss Army Knife” is a “composite functional kind,” one composed of several functional kinds. Without going into the relative merits of these different views, I think it is fair to say that such considerations show that it is at least possible for one particular object to simultaneously have proper functions associated with more than one functional kind.

It is also possible that the proper functions of an object – and with them, the functional kind/s that the object belongs to – may change over time. For instance, we might discover that an object that was originally designed as a steak knife also has particular properties that make it good as a crowbar (perhaps it has a blade that is thick and sturdy enough to pry open even heavy crate lids). This might lead to the object’s being consistently used to pry open crates, in addition to fulfilling its steak-knife-functions. From the perspective of functional explanation, this might constitute a change in the proper functions of the object, and entail an alteration of the background story concerning what functional kind/s the object belongs to. In this case, a new background story that is just as appropriate as the old one might now be in place, so that this object can be properly regarded to have not only the proper functions associated with the functional kind, steak knife, but also those associated with the functional kind, crowbar. As may be seen by the rather tentative nature of my remarks in this area, there is quite a bit of vagueness

regarding what would constitute a change in the proper functions of an object. For the purposes of this dissertation, we do not need to try to resolve this vagueness. I bring up the foregoing considerations only in order to suggest that it is quite possible for the proper functions of an object to change over time.

This discussion of functional analysis and explanation puts us in a good position to spell out Foot's view of goodness in inanimate objects in functional terms. Incorporating Wright's characterization, we can say that, on Foot's account, a particular object can properly be considered a member of a particular functional kind if it possesses characteristics or properties that (i) can at least potentially bring about particular consequences, and it is true that (ii) these characteristics or properties are present in the object because they can at least potentially bring about these consequences. Even a bad steak knife, for instance, can properly be considered a member of the functional kind, steak knife, because it possesses particular characteristics or properties (such as a dull blade) that can at least potentially bring about the consequence of cutting meat well. It is also true that whoever designed the knife included these characteristics or properties in the knife because they can at least potentially bring about this consequence. It is true that such a steak knife would be a rather poorly-made one, but it can nonetheless be properly considered a member of the functional kind, steak knife, insofar as conditions (i) and (ii) are satisfied. In order for an object to not just be a member of a functional kind, but be good as a member of the kind in question, it must possess characteristics or properties that are actually capable of fulfilling well the proper function/s associated with being a member of the kind. In light of the above, then, I propose the following functional characterization of Foot's view of goodness in inanimate objects. It requires a definition of functional kinds and a definition of goodness for members of functional kinds. Beginning with the latter:

(G) For any O, where O is an inanimate object, and there is a functional kind, F, such that O is a member of F, O is good as an F

if and only if

O possesses characteristics or properties that enable it to fulfill well the proper function/s associated with F,

Turning now to the definition of functional kinds, we can say this:

(FK) Where F is a kind of entity, F is a functional kind if and only if, for any O that is a member of F, O possesses characteristics or properties C such that

- (i) C or objects with C can at least potentially bring about particular consequences,
- (ii) C are present in O because they can at least potentially bring about these consequences.

As with both (F) and (Fp), (FK) presupposes that there is an appropriate background story that can explain how it is true that the presence of the characteristics or properties in something is due to their potential to bring about these consequences.

A Functional Account of Foot's View of Goodness in Living Organisms, Based on Field Biology

We now turn our attention to formulating an analogous functional account of Foot's view of goodness in living organisms. I argue that the formulation of such an account is significant in two ways: (1) It is consistent with Foot's views of goodness in living organisms, as discussed in the two preceding chapters, and articulates naturalistic criteria for goodness in living organisms that are at least initially credible, (2) It provides us with a non-causal-historical account of the workings of living organisms, one that does not draw upon the evolutionary history of the organism. Such an account is both consistent with and distinct from accounts that draw upon the organism's evolutionary history. As such, I argue, it offers an independently illuminating and

informative account of the workings of living organisms, one that is invaluable to enhancing our understanding of their workings.

In order to better appreciate how my functional account of Foot's view of goodness in living organisms can enhance our understanding of the workings of living organisms, we need to examine briefly the main features of causal-historical functional accounts that are informed by the evolutionary history of the organism, and the issues surrounding their formulation. Through this examination, we can better understand why there is a need to put forth a functional account of living organisms that is not causal-historical in nature. In the process, I shall also explain how such a non-causal-historical account is consistent with Foot's views of goodness in living organisms, and how her views in this area can be fruitfully spelled out in terms of such an account.

As I mentioned briefly in the preceding section, many contemporary proponents of functional explanations in living organisms follow Wright in putting forth causal-historical functional accounts informed by the evolutionary history of the organism.¹¹ In so doing, they hold that a causal feedback loop – similar to the one that obtains in my account of Foot's view of goodness in inanimate objects in the preceding section – characterizes proper functions of parts,

¹¹ Indeed, the tendency among philosophers of biology to follow Wright in converging on causal-historical functional accounts of living organisms is so prevalent that Allen and Bekoff have labeled this “the standard line” in a recent survey of the literature. See Colin Allen and Marc Bekoff, ‘Function, Natural Design, and Animal Behavior: Philosophical and Ethological Considerations’, in N.S. Thompson (ed.), *Perspectives in Ethology 11* (New York: Plenum Press, 1995), 1–46. Proponents of this standard line include Colin Allen, Francisco Ayala, Marc Bekoff, Ruth Millikan and Karen Neander. See Colin Allen and Marc Bekoff, ‘Biological Function, Adaptation, and Natural Design’, *Philosophy of Science*, vol., 62, no. 4 (December 1995), 609–22; Francisco Ayala, “Teleological Explanations”, in T. Dobzhansky (ed.), *Evolution* (San Francisco: W.H. Freeman and Co., 1977), 497–504; Ruth Millikan, *Language, Thought, and Other Biological Categories: New Foundations for Realism* (Cambridge, Massachusetts: MIT Press, 1984), and ‘In Defense of Proper Functions’, *Philosophy of Science*, vol., 56 no. 2 (June 1989), 288–302; Karen Neander, ‘The Teleological Notion of “Function”’, *Australasian Journal of Philosophy*, vol., 69 (1991), 454–68. Robert Cummins is a prominent dissenter to the standard line. See Robert Cummins, ‘Functional Analysis’, *The Journal of Philosophy*, vol., 72, no. 20 (November 1975), 741–65, and ‘Neo-Teleology’, in Andre Ariew, Robert Cummins, and Mark Perlman (eds.), *Functions: New Essays in the Philosophy of Psychology and Biology* (Oxford: Oxford University Press, 2002), 157–72.

features and activities in living organisms, albeit with less causal precision than in the case of inanimate objects. Briefly, they hold that a particular consequence, Z, of the operation of a particular part, feature or activity, X, in an organism, O, constitutes the proper function of X just in case (i) Z is a consequence of the presence of X in O (among other things), and (ii) X is present in O because it is part of an organic system that increases the probability of Z occurring.

Evolutionary biologists differ in their views concerning exactly which of the consequences of the presence of X is the relevant one, the one for which “Z” should properly be the placeholder for. In other words, they disagree as to exactly what are the proper functions of particular organic parts, features and activities. How can there be such a disagreement, if these biologists all agree that the proper functions of parts, features and activities should be decided by the evolutionary history of the organism? Such a disagreement can be traced to a divergence in views among evolutionary biologists over what is properly the unit of selection in the evolutionary process.¹² Evolutionary theory holds that a particular part, feature or activity is found in an organism because the part, feature or activity was selected for. This raises the further question: *Why* was the part, feature or activity selected for? Did natural selection favor this particular part, feature or activity because it benefited the organism that possessed it, causing the organism to be more successful than other organisms in surviving and flourishing in its environment? Or was the part, feature or activity selected for because it benefited the group to which the organism belonged, causing the group to be more successful than rival groups in surviving and propagating? Or did natural selection favor the part, feature or activity because the operations of the part, feature or activity facilitated the replication of the genes that coded for it

¹² This disagreement over what the unit of selection is in evolutionary biology has attracted considerable attention in contemporary philosophy of biology, resulting in what has come to be called the problem of *the units of selection*. An engaging discussion of this problem can be found in Elliot Sober, *Philosophy of Biology* (Boulder: Westview Press, 1993), 88 – 118.

in such a way as to cause these genes to be more successful in replicating themselves over the generations than rival genes coding for other parts, features and activities?¹³

Depending on what answer she gives to the question of why parts, features and activities were selected for, an evolutionary biologist could arrive at very different answers to the question of what the proper functions of parts, features and activities are. For instance, an evolutionary biologist might hold the view that the unit of selection is the group to which the organism belongs, that parts, features and activities were selected for because they benefited the group. This being the case, she would subscribe to a functional account which holds that the proper function of organic parts, features and activities is to bring about the survival and propagation of the group. Other evolutionary biologists dissent from this view, and hold that the unit of selection is not the group, but some other organic unit. Richard Dawkins, for instance, argues that the unit of selection should properly be the individual gene that codes for the particular organic part, feature or activity in question.¹⁴ As we shall see in the next section, William Fitzpatrick adopts Dawkins' view, and argues that the proper function of an organic part, feature or activity is to replicate the genes that code for it.

It is not within the scope of this dissertation to compare the relative merits of these different views of what the unit of selection is, and to arrive at a definite conclusion concerning what the unit of selection is ~~based on such a comparison~~. In any case, it is arguably not possible to arrive at such a conclusion: A big part of the reason why there is such a divergence of views

¹³See *Ibid.*, 88 – 118.

¹⁴For more details, see Richard Dawkins, *The Selfish Gene*, 2nd ed., (Oxford: Oxford University Press, 1989).

among biologists in the first place is because the available empirical evidence does not conclusively establish one particular organic unit as the unit of selection.¹⁵

This being the case, the only thing we can reasonably infer from the foregoing discussion is that there is not one standard causal-historical account of the proper functions of organic parts, features and activities. Rather, it is possible to formulate and subscribe to one of several divergent causal-historical accounts of the proper functions of organic parts, features and activities, depending on what one takes the unit of selection to be. This divergence in views among evolutionary theorists concerning the unit of selection does not in itself discredit causal-historical approaches to determining the proper functions of organic parts, features and activities. It could very well be that future empirical biological research will uncover evidence that will enable evolutionary biologists to conclusively establish the unit of selection, so that it is possible, at least in principle, that there will one day be a standard causal-historical account. Nevertheless, the lack of such a standard account should give one reason to at least consider sources other than evolutionary theory to see if they might provide us with credible accounts of proper functions in living organisms. It would seem worthwhile to at least explore the possibility of formulating an alternative, non-causal-historical account of the proper functions of organic parts, features and activities, one which is at least initially credible, and which does not result in such a divergence of views.

In fact, recent empirical biological research suggests a positive need for such a non-causal-historical account. Although the supporting evidence is not conclusive, such research suggests that evolutionary theory might not be able to fully account for certain biological functions that

¹⁵ In addition, Sober points out that the problem is compounded by the further possibility that 'different traits may have evolved for different reasons and that a single trait may have evolved for several reasons. Perhaps some traits are organismic adaptations while others are group adaptations. In addition, it is possible for a given trait to evolve because it simultaneously benefits objects at several levels of organization. This means that the question "What is the single unit of selection in all of evolution?" may have a false presupposition.' See Sober, *op. cit.*, 89.

are presently being fulfilled by certain organic parts, features and activities. For instance, Stephen Jay Gould points out that the panda's thumb fulfills the function of helping to enable the panda to strip bark from the bamboo upon which the panda feeds. The thumb fulfills this function even though its structure displays no apparent modifications for bark stripping; thus, the thumb arguably did not come to be present in the panda because it is part of some organic system that increases the probability of the panda's fulfilling this particular function.¹⁶ The presence of organic parts such as the panda's thumb, then, suggests that not all biological functions fulfilled by parts, features and activities in organisms can be characterized in causal-historical terms, and that some other account of proper functions in living organisms that does not draw upon the evolutionary history of the organism might be needed if we are to have a full picture of what the proper functions of organic parts, features and activities are.

It must be noted that examples such as the panda's thumb do not show that causal-historical accounts cannot characterize the proper functions of any organic parts, features or activities. This is true even if future research were to conclusively establish that the panda's thumb did not come to be present in the panda because it contributed to the panda's survival by enabling the panda to strip bark from bamboo. What examples like the panda's thumb might show is that there is no one single way of characterizing proper functions in living organisms, that in order to fully characterize proper functions in organic parts, features and activities, we need to draw upon more than one account of proper functions. It might be the case that the proper functions of some organic parts, features and activities are best explained by appealing to the evolutionary history of the organism, while the proper functions of others (such as the panda's thumb) are to be characterized by some other, non-causal-historical account, one that

¹⁶ A detailed discussion of this case can be found in Stephen Jay Gould, *The Panda's Thumb: More Reflections in Natural History* (New York: W.W. Norton & Co., 1980), 19 – 26.

does not draw upon the evolutionary history of the organism, but which is consistent with the findings of evolutionary theory.

What might such a non-causal-historical functional account look like? I suggest that we can draw upon Foot's views of goodness in living organisms (as outlined in the two preceding chapters) and the biological perspective of field biologists (upon which Foot's view is based) to formulate such an account. As we saw in the preceding chapter, Foot's view of goodness in living organisms is not concerned with the evolutionary history of the biological kind, but, rather, is concerned with "how a kind of plant or animal... develops, sustains itself, defends itself, and reproduces" at a particular point in evolutionary time.¹⁷ As such, it is concerned with how an organism fulfills the life functions of development, sustenance, defense and reproduction at a particular point in evolutionary time. At the same time, Foot's view, while ahistorical, also is not intended to conflict with the evolutionary perspective: The general tone of both Foot's and Thompson's works suggest that, while they intend their project to be ahistorical in nature, they do not deny the validity of evolutionary theory.

We saw in the preceding chapter that Thompson claims that Aristotelian Categoricals ("ACs") – and, by extension, Foot's account, which draws upon ACs to articulate naturalistic criteria for goodness in living organisms – are based on the kind of biological perspective adopted by field biologists. Field biologists are chiefly concerned with detailing what organisms do to fulfill life functions of development, sustenance, defense and reproduction in their natural habitats at a particular point in evolutionary time. Is it possible to come up with a background story which does not draw upon the evolutionary history of the organism, and which is consistent with this biological perspective? As we saw in the preceding chapter, the findings of field

¹⁷ Foot, *Natural Goodness*, 29.

biologists like Archie Carr tell us that female green turtles fulfill the life function of reproduction by coming onshore to lay eggs. Is there a non-causal-historical background story that allows us to construe the individual living organism as a functional system, and that also explains how activities that fulfill life functions in an organism – activities such as that of the female green turtle’s coming onshore to lay eggs – also fulfill proper functions within this system?

At least at a first glance, it seems plausible that there should be a way of explaining in non-evolutionary terms how organic parts, features and activities that fulfill life functions also fulfill proper functions within the organism. After all, scientists correctly identified the functions of organic parts, features and activities – one example is the function of the heart being to pump blood – even before the advent of evolutionary theory. It seems possible, then, to articulate a background story that can explain how, for instance, the activity of coming onshore to lay eggs fulfills a proper function within the individual green turtle, without appealing to evolutionary considerations.

What kind of non-evolutionary story can tell us how it is true that the activity of coming onshore to lay eggs fulfills a proper function within the individual green turtle? To answer this question, it is useful to begin by thinking more about the nature of the biological perspective adopted by field biologists. As we noted in the preceding chapter, a large part of the work of field biologists like Archie Carr consists in gathering facts about the parts, features and activities of organisms in their natural habitats. Some of these facts tell us how these organisms fulfill life functions, others do not; as we saw in the preceding chapter, many of the facts gathered by field biologists about organisms belonging to a biological kind have little or nothing to do with fulfilling life functions. Field biologists may observe, for instance, that algae tends to grow on

certain parts of the bodies of adult green turtles, a fact which probably has little if anything to do with fulfilling life functions of the turtles.

How do field biologists go about distinguishing facts that explain how life functions are fulfilled from those that do not? Doing field biology is ultimately more than just engaging in the activity of gathering a whole bunch of disparate facts about organisms belonging to a particular biological kind. Field biology is a science, and doing science involves formulating hypotheses from the facts or raw data that have been gathered. Specifically, the work of field biologists involves formulating hypotheses that purport to explain regularly-occurring phenomena in organisms in terms of their contribution to fulfillment of life functions in the organism. In order to evaluate the credibility of particular hypotheses, these hypotheses must be tested by gathering more relevant data. For instance, a field biologist, observing that algae regularly grows on the bodies of adult turtles, might question whether this algae contributes to fulfilling a life function in the adult turtles: She might wonder if the algae might play a role in keeping certain potentially deadly viruses from invading the turtle's bloodstream, and thus contribute to the survival of the turtle in its natural habitat. She would formulate a hypothesis to the effect that algae on the bodies of adult green turtles contributes to prevention of viral infection, and then gather more data and perform tests to evaluate whether this hypothesis is verified by the data.

Seen in this light, an important element of the work of field biologists consists in formulating hypotheses that purport to identify biological facts that credibly explain how life functions are fulfilled. Whether a particular hypothesis identifies a fact that explains how life functions are fulfilled depends on whether the hypothesis is verified by testing; a credible hypothesis is one that has been verified by such testing, and that has so far not been falsified by contrary evidence. One example of such a hypothesis would be the hypothesis that female green

turtles' coming onshore to lay eggs contributes to the reproductive function. A field biologist would begin by observing this particular activity and asking herself if this activity might not contribute to the reproduction of green turtles. She would then gather more data – such data would presumably involve the observation that a significant number of the eggs that are laid in this fashion actually go on to hatch into viable hatchlings, despite the presence of predators like pigs and dogs on the beach – and conclude that these data verified her initial hypothesis.

In light of the foregoing, then, it is possible to articulate a functional account of living organisms based on the perspective of field biology, one that is consistent with both Foot's and Thompson's views. From the perspective of the field biologist, the individual organism constitutes a functional system. On this picture, the organism fulfills life functions as a member of its biological kind if it possesses particular parts and features and engages in particular activities that contribute to such fulfillment. In fulfilling these life functions, these parts, features and activities also fulfill proper functions within the organism. Based on the perspective of field biology, then, we can hold that the proper function, *Z*, of a particular part, feature or activity *X*, in a particular kind of organism can be characterized as follows:

(F_o): The proper function of *X* in an organism *O* is *Z* iff:

- (i) *Z* is a consequence (result) of *X*'s being there in *O*,
- (ii) *X*'s bringing about *Z* fulfills a life function in *O*,

where we are justified in holding (ii) in virtue of the fact that an appropriate hypothesis which holds that *X*'s bringing about *Z* fulfills a life function in the organism has been verified, and has not been falsified by contrary evidence so far.

(F_o) differs from **(F)** and **(F_p)** in one significant way. Clause (ii) in **(F_p)** read, “*X* is there in *O* because it does (results in) *Z*”; on both **(F)** and **(F_p)**, something's being a proper function is

characterized in terms of a feedback loop. As we have seen, philosophers like Wright who subscribe to an evolutionary functional account of living organisms hold that such a feedback loop also characterizes the proper functions of parts, features and activities in organisms, albeit with less causal precision.

Such a causal feedback loop is absent in (F_o) . In principle, on (F_o) , it is possible for X to fulfill a life function by bringing about Z even if X is not present in O because it results in Z. In putting forth this possibility, I do not intend for (F_o) to contradict evolutionary functional accounts of living organisms. As mentioned earlier, both Foot and Thompson – as well as field biologists – do not deny the validity of evolutionary biology. A contemporary field biologist can hold that X's bringing about Z fulfills a life function in O, while at the same time acknowledging that X is also present in O because it is part of an organic system that increases the probability of whatever it is that needs to occur in order that X be selected for, depending on what the unit of selection is on the background story that informs the particular evolutionary functional account in question.

Based on the foregoing discussion, we can now build on (F_o) to formulate a functional account of Foot's view of goodness in living organisms, based on the perspective of field biology:

(Glo): For any O, where O is a living organism, and there is a biological kind, S, such that O is a member of S, O is good as a member of S

if and only if

O possesses parts and features and undertakes activities that are good for fulfilling the proper functions associated with S,

where O fulfills the proper functions associated with S if and only if the parts, features and activities of O fulfill life functions.

I shall presently address a few concerns that might reasonably be raised about my field biological functional account of Foot's view of goodness in living organisms. Comparing this account with the functional account of Foot's view of goodness in inanimate objects in the preceding section (as formalized in (\mathbf{F}_p)), we can see one significant difference. In (\mathbf{F}_p) , a necessary condition for a particular consequence's being a proper function of a characteristic or property is that the characteristic's or property's presence in the object is due to its bringing about this consequence. In (\mathbf{F}_o) , a particular consequence is a proper function of an organic part, feature or activity not because the presence of the part, feature or activity is due to its bringing about this consequence, but because its bringing about this consequence fulfills a life function. The account of proper functions expressed by (\mathbf{F}_o) , then, constitutes a departure from (\mathbf{F}_p) : Unlike (\mathbf{F}_p) , (\mathbf{F}_o) does not hold that proper functions are to be explained in terms of the part, feature or activity's presence in the organism being due to its bringing about the consequence in question.

This departure is by no means accidental. Wright's account (and others like it) purports to explain proper functions in living organisms in terms of an evolutionary historical account. A field biological account of proper functions, as expressed in (\mathbf{F}_o) , is not concerned with putting forth any such historical explanation. Instead, field biology postulates a set of life functions, namely, development, sustenance, defense and reproduction. Particular parts, features and activities in organisms are deemed to fulfill their proper functions if they bring about consequences that fulfill these life functions.¹⁸

¹⁸ It is worth noting that Robert Cummins' work in functional analysis is congruent with my non-causal-historical field biological account, and can be seen to provide independent support for it. In his landmark paper, 'Functional

At this point, one worry can justifiably be raised about (F_o). It might be objected that, if a non-causal-historical perspective such as that put forward by field biology can be admitted as one upon which to base a functional account of living organisms, what is there to prevent one from basing functional accounts on other non-causal-historical perspectives, some of which may well be scientifically spurious? One might, for example, be interested in utilizing living organisms as circus exhibits, and formulate a functional account of living organisms based on the perspective of their utility as circus animals. From this perspective – I suppose one can call this the “circus-organism perspective” – consequences of parts, features and activities in organisms are deemed to fulfill proper functions if they are good for providing entertainment to circus-goers. On such an account, for example, elephant seal flippers that are broad enough for the seal to stand upright on them would be deemed to fulfill a proper function, even if these flippers serve no evolutionary or field biological purpose. It might be true that such a “circus-organism” perspective of proper functions is scientifically spurious, the objection continues, but if “X’s bringing about Z fulfills a life function in O” can be admitted as condition (ii) in (F_o), there seems to be no principled basis for ruling that something along the lines of “X’s bringing about Z fulfills a circus-function in O” cannot constitute condition (ii) in an analogous formulation of a circus-exhibit account of proper functions in living organisms. The worry, then, is that if we

Analysis’, he sets forth a non-causal-historical functional account in terms of what he calls *analyzed* and *analyzing* capacities. The basic idea is that we can explain that the function of the vertebrate heart is to pump blood by showing that such pumping of blood constitutes an analytical component of some larger analyzed capacity; in this case, the analyzed capacity in question is the organism’s circulatory capacity. Since an account can be given of the organism’s capacity to maintain circulation, and this account adequately explains such a capacity by, in part, appealing to the capacity of the heart to pump blood, the heart’s pumping of blood can be understood to fulfill a proper function by contributing to the maintenance of the circulatory capacity of the organism. On Cummins’ picture, then, an individual living organism can be construed as a functional system composed of several distinct analyzed capacities, and various parts, features and activities within the organism can be seen to fulfill proper functions when they operate in such a way as to contribute to the operation of these analyzed capacities. It is possible, at least in principle, to spell out the life functions of development, sustenance, defense and reproduction in my field biological account in terms of these analyzed capacities; for instance, by contributing to the maintenance of the circulatory capacity, the heart’s pumping blood fulfills the life function of sustenance.

admit the field biological account as a non-causal-historical functional account of living organisms, we would have opened a Pandora's box containing many other, scientifically spurious non-causal-historical accounts, and there would be no way of shutting the box.

Fortunately, this worry is ultimately unfounded. Admitting a non-causal-historical perspective such as that put forth by field biology does not open the way for other, less scientifically respectable functional perspectives. On both **(F)** and **(F_p)**, parts, features and activities in organisms fulfill proper functions. Such fulfillment of proper functions occurs within the larger context of a functional system. The causal historical background provided by evolutionary biology allows Wright (and other proponents of similar evolutionary historical accounts) to construe the living organism as a whole as constituting such a functional system. If there is a non-causal-historical background story that allows us to construe the living organism as a whole as constituting a functional system, we would have to accept that, on such a story, the parts, features and activities of the organism fulfill proper functions, in the same way in which organic parts, features and activities fulfill proper functions on the evolutionary functional accounts advanced by Wright and others. My field biological account constitutes just such a functional account, since the field biological background story informing it allows us to construe the living organism as a whole as constituting a functional system. By the same token, the integral role played by an appropriate background story also allows us to exclude accounts such as the circus-exhibit functional account. The circus-exhibit account is concerned with the functional roles that can be played by particular parts, features and activities in organisms in fulfilling circus-functions, and does not construe the living organism as a whole as constituting a

functional system. This being the case, then, we have a principled basis for not admitting the circus-exhibit account as a functional account of living organisms.¹⁹

A further worry may be raised against my field biological functional account. It may be objected that, on (F_o), too many consequences would qualify as proper functions. For instance, it may be observed that another regularly occurring consequence of the female green turtle's coming onshore to lay eggs is that many of these eggs end up getting eaten by dogs. It might even turn out that, in an average batch of eggs laid, at least as many eggs end up getting eaten by dogs as those that eventually hatch into viable hatchlings. Such an observation can then be formulated as a hypothesis to the effect that female green turtles' coming onshore to lay eggs contributes to the survival of dogs on the shore. Since green turtle eggs that are laid in this fashion do regularly end up getting eaten by dogs, the hypothesis would turn out to be verified. Therefore, it might be argued, on my account, getting their eggs eaten by dogs would be a proper function of female green turtles' coming onshore to lay eggs just as much as fulfilling the reproductive function.

It is true that, on my account, several distinct consequences would each qualify as proper functions, but I do not think this really presents a problem for my account. A field biologist who is studying green turtles would acknowledge that female green turtles' coming onshore to lay eggs does end up providing dogs with a source of food. However, it is not the green turtles' coming onshore to lay eggs that fulfills the life function of survival in dogs, functionally speaking. In functional terms, it is the dogs' engaging in the activity of digging up the eggs from

¹⁹ This is not to say that the fulfillment of circus-functions does not take place within the context of a functional system. Indeed, I think it can be argued by a proponent of the circus-exhibit functional account that in this account, it is the circus as an entertainment organization which constitutes the functional system, and that different living organisms (and their parts, features and activities) fulfill various circus-functions within such a functional system. My point is that the important difference between the circus-exhibit functional account and accounts like the field biological and evolutionary historical functional accounts lies in the fact that, in the latter two accounts, the individual living organism is construed as constituting a functional system in itself.

the sand that fulfills the life function of survival in dogs. Perhaps the point can be more readily made if we adopt the perspective of another field biologist, one who is studying not green sea turtles, but dogs on the beach. Such a field biologist would be interested in explaining the parts, features and activities of these dogs in terms of their contribution to fulfilling life functions in these dogs. Even though it is true that female green turtles' laying eggs does end up providing food for the dogs, this activity is an activity of green turtles, not of dogs. The field biologist is interested in how the activity of dogs fulfills life functions in dogs, and not in how the activity of green turtles fulfills life functions in dogs. In any case, it is really not the green turtles' laying eggs onshore that fulfills the life function of survival in dogs: We can imagine a group of unmotivated dogs who are too lazy to dig up the eggs, and simply sit by and watch passively as the female green turtles come onshore and go about their business of laying eggs. Functionally speaking, it is really the dogs' digging up the eggs laid by the female green turtles, and not the female green turtles' coming onshore to lay eggs, that fulfills the life function of survival in dogs.

Fitzpatrick's Evolutionary Functional Account

In putting forth my field biological functional account, I hope to have given at least some initial credibility to the view that a functional account of the workings of parts, features and activities in living organisms can be based on a non-causal-historical scientific perspective, one that is consistent with Foot's view of goodness in living organisms. However, as Wright's evolutionary-historical functional account of the workings of organisms suggests, the field biological perspective is far from being the only perspective upon which one can base a functional account of living organisms. Most contemporary functional accounts of organisms follow Wright in drawing upon evolutionary considerations in order to explain proper functions in the parts, features and activities of living organisms.

In particular, William Fitzpatrick has recently put forth such an evolutionary functional account of the workings of organisms. Basing his account on the work of Dawkins, Fitzpatrick argues for what he terms a “gene’s eye view” of the workings of living organisms. On this view, the proper functions of parts, features and activities in living organisms must ultimately be understood in terms of their roles in replicating the genes that code for them. Fitzpatrick’s account warrants special attention on our part, because he argues that, if his account is correct, then Foot’s view is in conflict with evolutionary biology, and provides at best a partial and limited account of the workings of living organisms. If his account is correct, then the proper functions of organic parts, features and activities should correctly be replication of the genes that code for them. On this picture, fulfillment of life functions like development, sustenance, defense and reproduction constitute merely incidental effects of the operations of organic parts, features and activities; effects that are, at best, instrumental to fulfilling the proper function of genic replication.

In putting forth his account, Fitzpatrick is not denying that organic parts, features and activities fulfill life functions; nor is he denying that fulfillment of such functions promotes the well-being and physical flourishing of the individual organism in many cases. It is with this in mind that he states:

Nothing I have said should be taken as a denial of familiar facts about the functions of biological traits... I can say as well as anyone else that the function of the heart is to pump the blood, for example, and that the end served is the blood’s circulation. The only difference is that where others might appeal to the survival or reproduction of the organism or to the meeting of its various needs as some kind of ultimate end in its own right, I insist that where such ends come into the picture, they must be placed within the wider framework revealed by the natural selection background.²⁰

²⁰ William J. Fitzpatrick, *Teleology and the Norms of Nature* (New York: Garland Publishing Inc., 2000), 105. Although Fitzpatrick does not use the term “proper function” in characterizing the roles played by organic parts, features and activities in replicating the genes that code for them, his characterization of the functional roles of organic parts, features and activities with respect to genic replication is conceptually similar to what I have been

Fitzpatrick claims that while we may appeal to familiar facts about fulfillment of life functions in explaining the workings of organic parts, features and activities – we may say, for instance, that by pumping blood and circulating it throughout the body, the heart fulfills the life function of survival in vertebrates – such explanations cannot by themselves tell us what the proper functions of organic parts, features and activities are. In order to understand what these proper functions are, we need to consider such facts about fulfillment of life functions “within the wider framework revealed by the natural selection background.” Considered within this wider framework, Fitzpatrick argues, such explanations are merely descriptions of particular incidental effects of the operations of organic parts, features and activities, and provide at best a limited and partial picture of the workings of organisms.

In putting forth his account, then, Fitzpatrick can be seen to be posing a fundamental challenge to the credibility of Foot’s view, one that her view needs to be able to address if it is to be a plausible view of goodness in organisms. As we saw in chapters 3 and 4, if Foot’s view of goodness in nonhuman organisms is to be plausible, she needs to have criteria of goodness based upon which we can justifiably evaluate whether particular organisms are good as members of their respective biological kinds, and whether particular parts, features or activities in these organisms are operating in ways that contribute to the organisms’ being good as members of their kinds.

If Foot is legitimately to make such evaluative claims of goodness, she needs to have a principled way of evaluating whether particular effects of the operations of a particular part, feature or activity of an organism contribute to the organism’s being good as a member of its

referring to with the term “proper function..” For instance, on Fitzpatrick’s view, although the function of the heart is to pump blood, its proper function is to replicate the genes that code for it. I have used this term in outlining his view because it provides a common terminology with which to compare his view and Foot’s.

kind. In functional terms, if Foot is to be able to justify such evaluative claims, she needs to have a principled way of ascertaining whether the effects in question constitute the proper function of the part, feature or activity (thus contributing to the organism's being good as a member of its kind), or whether they are merely incidental effects of its operations. In order to justify her claims, then, Foot needs a principled way of differentiating between proper functions and incidental effects in the workings of organisms. In this regard, an account of proper functions in organisms is central to the overall plausibility of her view of goodness in organisms. It is with these considerations in mind that I put forth my field biological account of proper functions. I do this with the aim of showing that it is possible to **functionally** justify Foot's claims in terms of a non-causal-historical account of proper functions in organisms. In so doing, I hope to have imparted at least some initial viability to Foot's view of goodness.

This initial viability, however, is the most that I can hope to attain with my efforts thus far. In order to determine the plausibility of Foot's view more fully, we must consider whether her view (and the field biological functional account of it that I have sketched above) can adequately address the challenges posed to it by evolutionary accounts like Fitzpatrick's. As we shall presently see, Fitzpatrick argues that without an understanding of the evolutionary causal history by which organisms were put together as functional systems, we have no legitimate way of discerning whether a particular effect of the operation of an organic part, feature or activity constitutes the fulfillment of its proper function within the functional system, or whether it is merely an incidental effect of its operation. If Fitzpatrick's account is correct, then only evolutionary-historical accounts of proper functions in living organisms can be correct functional accounts of living organisms, and non-causal-historical accounts like Foot's cannot correctly and accurately explain the proper functions of organic parts, features and activities.

In order to fully assess the overall plausibility of Foot's view, then, it is necessary for us to examine Fitzpatrick's account more closely. It is only through such an examination that we can assess whether my field biological functional account of Foot's view possesses the resources to address the fundamental challenge posed by Fitzpatrick's account.

We begin by considering "the wider framework revealed by the natural selection background" which underlies Fitzpatrick's functional account. In what way is this framework supposed to give us a more accurate and unified picture of the workings of organisms than the sort of picture given by Foot's view, and by my field biological functional account?

In order to answer this question, we shall need to consider how Fitzpatrick's framework accounts for the proper functions of parts, features and activities in organisms.

Fitzpatrick argues that both living organisms and certain inanimate objects can be characterized as functional systems. Being functional systems, he argues, the workings of living organisms and these inanimate objects can be characterized by the following general principle:

P: With regard to a given type of functional system S, whatever it is that is ultimately causally responsible for the compresence and organization of its parts and features – in such a way as to make it the case that it is *no accident* that the system possesses *such* parts and features and *such* an organization among them that they interactively bring about a certain special subset of the *effects* they do, thus allowing us to distinguish non-incidental effects or contributions from incidental ones – is thereby also responsible for determining the specification of working for S; that is, it equally determines the nature of the functions and ends served by these parts, features and activities so organized, and the way in which these functions and ends are related at various levels, i.e., how exactly they fit into the hierarchical teleological structure of S.²¹

Fitzpatrick's Functional Account, Applied to Inanimate Objects

We can begin by looking at how he applies P to explain the workings of inanimate objects. He brings up the example of a gasoline engine. In the case of such an engine, he states, the process of design "is ultimately casually responsible for the compresence of such things as the

²¹ Ibid., 42.

camshaft, valve lifters, push rods, etc., and their organization into a single coherent system.”²² Further, he argues, intelligent design also makes it the case that these various parts are brought together and organized in such a way as to bring about certain effects, so that it “has also established special non-incidentally relations between the system’s parts and features and those effects.”²³ This, in turn, allows us to draw a meaningful distinction between the *non-incidentally* effects of the workings of the engine’s parts, such as the precise opening and closing of the valves in the engine, which contributes to generating rotational power and to the whole engine’s operating as a functional system, and merely *incidentally* effects of these workings, such as the noises made by the valves in opening and closing, which make no contribution whatsoever to the engine’s operating as a functional system. Insofar as we can look to design as a causal process which establishes such non-accidental relations between particular parts and features and particular non-incidentally effects, Fitzpatrick argues, we can correctly identify these non-incidentally effects as the proper functions of particular parts and features. In this way, we can understand the object of which the particular parts are components ~~of~~ – in this case, the gasoline engine – as constituting a functional system.

How are we to make sense of the non-accidental relation that purportedly holds between particular parts and features and particular non-incidentally effects, on Fitzpatrick’s account? This is an important question, since the concept of a non-accidental relation is central to the overall plausibility of Fitzpatrick’s account: On his account, it is the presence of such a relation that makes it true that a particular effect is the non-incidentally effect and proper function of a particular part, feature or activity in an organism or inanimate object. Although Fitzpatrick does

²² Ibid., 37.

²³ Ibid., 37.

not explicitly state it, I believe that such a non-accidental relation can be cashed out in terms of Wright's characterization of a proper function as involving a feedback loop. That this is the case can be seen when we apply Wright's formulation here:

(F_{iv}) The proper function (or non-accidental effect) of the valves in a gasoline engine is to open and close in a precise manner iff:

- (i) Opening and closing in this precise manner is a consequence of the valves' being in the engine,
- (ii) The valves are in the engine because they open and close in this precise manner.

(ii) is true in virtue of design: Whoever designed the engine included the valves in it in order to bring about this precise opening and closing. This being the case, (i) and (ii) jointly establish a particular kind of relation between the valves and their precise opening and closing, making it true that the valves have been placed in the engine in order to bring about such precise opening and closing; a relation which cannot be established between, say, the valves and the noises that they make while opening and closing, since it is simply not true that the valves have been placed in the engine in order to make these noises.

Moreover, Wright's characterization can also be applied to show how this same kind of non-accidental relation holds at higher levels of the gasoline engine's functioning. For instance, we can go on to characterize the proper function of the precise opening and closing of the valves as follows:

(F_{iv}) The proper function of the precise opening and closing of the valves is to bring about a particular rate of flow of air/fuel mixture intake and exhaust gases iff:

- (i) This particular rate of flow comes about as a consequence of the precise opening and closing of the valves,

- (ii) The valves open and close in this precise manner because they bring about this particular rate of flow.

As in (Ffv), (ii) in (Ffo) is true in virtue of design. As in (Ffv), (i) and (ii) in (Ffo) jointly establish a particular kind of relation between the valves' precise opening and closing, and the occurrence of a particular rate of flow of air/fuel mixture intake and exhaust gases, making it true that the valves have been made to open and close in this precise manner in order to bring about this particular rate of flow. In this way, Wright's formulation can be repeatedly applied to higher and higher levels of the engine's functioning, so that this same kind of non-accidental relation can be established at the highest level of the engine's functioning, showing that the non-accidental effect and proper function of the engine as a whole is to generate rotational power.

Fitzpatrick's Functional Account, Applied to Living Organisms

If Fitzpatrick is to successfully employ principle P to functionally characterize the workings of living organisms, in a way similar to that in which he has characterized the workings of inanimate objects, he must identify an analogous causal process in living organisms. Such a process needs to be identified if he is to establish non-accidental relations between particular parts, features and activities and particular non-accidental effects.

Adopting Dawkins' view that the individual gene is the unit of selection, Fitzpatrick argues that such a causal process is to be found in the process of natural selection, understood in terms of genic selection over successive generations. Fitzpatrick notes that, in order for natural selection to occur within a given population of living organisms, there must be some variation among the members of the population with regard to the sets of genes carried by different members of the population. Such genetic variation results in some variation in the parts, features and activities displayed in various individuals within the population: While different members of the population are similar enough for us to be able to identify them as belonging to the same

biological kind, the differences in the composition of the sets of genes, or genotypes, carried by different members of the population results in differences in parts, features or activities among different members of the population. This is so because different genotypes code for different sets of parts, features or activities – or, in evolutionary biological terms, for different phenotypic traits. Such differences in parts, features or activities results, in turn, in differential propagation between the different sets of genes, so that one particular set of genes resulting in one particular set of traits proves more effective at propagating itself over the generations than another set of genes resulting in another set of traits. What causes one set of genes to be more effective at propagating itself than another? In most cases, a particular set of genes out-replicates rival sets by coding for a particular trait (or set of traits) that proves more effective in ensuring the eventual reproductive success of the organism bearing the trait than a rival set is in ensuring the eventual reproductive success of its bearer organism. Such a set of genes may contribute to the reproductive success of the organism by contributing to its survival fitness, thus increasing the organism’s chances of living long enough to reproduce. It may also enhance the organism’s reproductive success by increasing its probable number of offspring, through increasing its reproductively-active life span. Alternatively, it may contribute to the organism’s reproductive success more directly, by coding for a particular trait that makes the organism more effective at attracting mates or pollinators.²⁴ A simple example of this may be found in a set of genes which results in the petals of a flower having a particular color, which proves more successful in attracting pollinators than genes which do not code for such a color. In thus increasing the

²⁴ It may also happen in some cases that the genes in question code for traits that contribute not to the reproductive success of the bearer organism, but to the reproductive success of some relatively close kin of the organism. These are cases of *kin selection*. This works to propagate the genes in question because close kin are closely related genetically, “typically sharing 50% of their non-species standard genes, which is far greater than what they share with non-kin.” This being the case, when the reproductive success of the kin organism is increased, the chances of the particular type of gene being propagated into the next generation also increase. For more details, see *Ibid.*, 58 – 60.

reproductive success of the plants that contain this particular set of genes, the set in question steadily out-propagates rival sets. Eventually, over the course of generations, this particular petal coloration comes to be regarded as the standard adaptation in the biological kind.²⁵

Fitzpatrick argues that such a process of genic selection causally explains why parts, features and activities are compresent and organized in a particular way in living organisms belonging to a particular biological kind at a particular point in evolutionary time. Such a process, he argues, also establishes the proper function of these parts, features and activities to be that of replicating the genes that code for them.

In order for Fitzpatrick to successfully argue that the proper function of organic parts, features and activities lies in genic replication, there needs to be some way of demonstrating that the process of genic replication establishes a non-accidental relation between these parts, features and activities and their effects on genic replication. It is only then that these effects can be correctly identified as the non-incidental effects and proper functions of these parts, features and activities. As in the case of inanimate objects, we can turn once again to Wright's characterization in order to ascertain whether any such non-accidental relation holds between particular organic parts, features or activities and their effects on genic replication. Applying Wright's formulation to our example of the flower with petals of a particular color, we get:

(F_{ff}): The proper function of a particular petal coloration in a flower is to replicate the genes that code for such a color iff:

- (i) Replication of the relevant genes is a consequence of such a petal coloration (among other things),

²⁵ Ibid., 56 – 7.

(ii) This particular coloration is present in the flower because it is part of a system that increases the probability of replication of the relevant genes.

In virtue of what is (ii) true? (ii) is true in virtue of the natural selection history of flowers of this particular kind, understood in terms of genic selection. This particular coloration is present in the flower because it is part of a system that increases the probability of the replication of the relevant genes, in virtue of the causal-historical fact that at an earlier point in evolutionary time, genotypes with genes that coded for this particular coloration out-propagated genotypes that did not code for this particular coloration. (i) and (ii), then, jointly establish a non-accidental relation between this particular petal coloration and its effects on replication of the genes that code for it, making it true from an evolutionary perspective that this coloration is present in the flower because it is part of a system that increases the probability of replication of the relevant genes.

Two Distinct Functional Accounts: Why Evolutionary Biology Does Not Undermine the Field Biological Functional Account of Foot's View of Living Organisms

Having understood the basic features of Fitzpatrick's evolutionary functional account of the workings of organisms, we are now in a position to compare his account with my field biological account. Does Fitzpatrick's account pose a threat to the credibility of my account? In what follows, I argue that, on both functional and scientific grounds, Fitzpatrick's account does not undermine the credibility of my account.

It is true that the evolutionary perspective has the potential of providing a unifying general account of the workings of organisms, one that field biology cannot replicate. This is true despite the presence of unresolved debates within evolutionary biology, especially the debate over what the unit of selection is in the process of natural selection. It is quite possible, at least in principle, that future empirical research may uncover evidence that would allow evolutionary biologists to resolve once and for all this question concerning the unit of selection. When this happens, we

would have a definite answer as to whether organic parts, features and activities are selected for because they benefit the gene, the organism, or the group. It may also turn out that such empirical research will reveal that there is not one, but a plurality of units of selection. For instance, it is quite possible that in some cases, parts and features are selected for because they benefit the individual organism, while in others they are selected for because they benefit the genes that code for them.²⁶

Even though evolutionary biology has the potential of providing such a unifying account, however, field biology (and Foot's view of living organisms, which is based on it) still provides us with an informative, independently illuminating scientific account of how organisms fulfill life functions in their natural habitats at a particular point in evolutionary time; an account which can only add to our understanding of the workings of living organisms. To begin with, when we consider the different scientific perspectives that inform Fitzpatrick's account and Foot's view, we find that, far from the former undermining the latter, the two actually mutually complement and enhance each other. Insofar as both field and evolutionary biology are informed by the dictates of what is commonly regarded as sound scientific method, the correctness of an evolutionary functional account does not undermine the credibility of an analogous account based on field biology. As such, field biological facts and evolutionary biological facts about organisms of a particular biological kind constitute two distinct and mutually consistent bodies of knowledge pertaining to organisms of the kind. To say that the heart is present in a particular organism in order to pump blood and bring about circulation is to make a functional statement about the workings of the heart from the perspective of field biology. To say that the heart is present in the organism because it is part of a system that increases the probability of replication

²⁶ See Sober, *op. cit.*, 89.

of the genes coding for it is to make a functional statement about the workings of the heart from the perspective of evolutionary biology understood in terms of genic selection.

Evolutionary biology is indispensable to understanding how organisms and their parts and features came to operate in the way they do. To borrow an analogy from Foot, the causal historical account that evolutionary biology provides can be likened to a moving picture of the evolving roles that parts and features have played within the organism over the generations as they propagate the genes that code for them.²⁷ Knowledge of evolutionary biology, then, is necessary if one is to fully understand how organisms and their parts, features and activities came to be organized and compresent in the way they are. A study of organisms of a particular biological kind cannot hope to yield an accurate and unified explanation of their workings if it does not take into account the evolutionary history of the biological kind.

None of the foregoing, however, undermines the value of field biology and functional accounts of organisms based upon it. If looking at the moving picture of evolutionary history is an invaluable way of understanding the workings of organisms of a particular biological kind, stills in this moving picture are no less valuable as a source of knowledge. Through patient observation, the field biologist steadily uncovers a “freeze-frame” perspective of the organism at one particular point in evolutionary history. The insights gleaned from this perspective can be utilized to bring about a better understanding of the evolutionary historical development of the organism. Understanding evolutionary history can contribute, in turn, to a greater appreciation of how and why parts, features and activities fulfill life functions the way they do at a particular point in evolutionary time. Far from one undermining the other, then, evolutionary and field

²⁷ Foot, *Natural Goodness*, 29.

biological functional accounts represent two complementary perspectives, each of which furthers understanding of the other.

Moreover, cases like Gould's example of the panda's thumb suggest that there may very well be particular cases in which we can make sense of proper functions in organic parts and features only by appealing to a non-causal-historical account like my field biological account, since such cases suggest that it is quite possible for parts and features to fulfill biological functions within organisms even though they were not naturally selected because they fulfilled these functions. If this is the case, it may very well be that we can only obtain a full picture of how parts, features and activities fulfill proper functions in living organisms by appealing not to one overarching account of proper functions, but to two different accounts, one causal-historical, the other non-causal- historical. This could be true even if, at some future point in time, empirical biological research yields sufficient data to enable evolutionary biologists to determine what the unit/s of selection is/are in the process of natural selection, since it could still be the case at this point in time that particular parts and features (such as the panda's thumb) came to fulfill biological functions without having being naturally selected for these functions. Seen in this light, then, a field biological functional account of Foot's view of goodness in living organisms has the potential to make a significant contribution to our understanding of the workings of living organisms.

Implications of My Field Biological Functional Account

In addition to employing the foregoing functional argument – characterized by principle P – in attempting to establish that the proper functions of organic parts, features and activities lie in their effects on gene replication, Fitzpatrick also attempts to illustrate and support his view by appealing to specific examples in living organisms. We shall briefly consider one such example. I choose to consider this particular example not just to show that it can be accommodated by my

field biological functional account, but also because it reveals some interesting implications of interpreting Foot's view in field biological functional terms.

An interesting example Fitzpatrick brings up involves the male bird of paradise, which has a peculiarly long tail. Such a long tail is an encumbrance that decreases the personal survival fitness of an individual male bird: Among other things, it makes the bird move slower and therefore less able to escape its predators. Therefore, Fitzpatrick concludes, such a tail does not contribute to fulfilling the life-function of survival in the male bird of paradise; indeed, it detracts from it. However, Fitzpatrick goes on to observe, such a long tail happens to be very attractive to females of the species, so that individual male birds of paradise tend to enjoy a high reproductive output, even if their personal survival fitness and average life-span is significantly decreased by having such long tails. This example poses a problem for Foot's view of goodness in living organisms, Fitzpatrick argues. Insofar as Foot's view is to be understood as an Aristotelian view which holds that organic parts, features and activities function in such a way as to contribute to the physical flourishing of the organism, Fitzpatrick argues,

it is hard to see how such a trait can literally be said to benefit its possessor simply because it tends to increase his reproductive output – especially since it tends at the same time to threaten his very survival... it is implausible to insist that something that merely tends to increase probable reproductive output, so that an organism tends to have more offspring in the long run than it otherwise would have, or more offspring than “rival” males in the population with shorter tails, can automatically be said to be beneficial to the organism – especially when it is at the expense of personal survival-fitness.²⁸

On the other hand, Fitzpatrick argues, if we posit replication of the relevant genes as the proper function of parts, features and activities, we arrive at a more coherent and illuminating explanation of the proper function played by the long tail in the male bird of paradise. At an earlier point in evolutionary time, male birds with such long tails tended to enjoy greater

²⁸ Fitzpatrick, *op. cit.*, 71 – 2.

reproductive output than males that lacked such tails, even if such long-tailed males tended, on average, to live shorter lives. This greater reproductive output meant that the genes that coded for such a long tail were more widely propagated down the generations than genes that did not code for such a long tail, even if the bearers of these long-tail genes did not live as long as their short-tailed counterparts. Over the course of generations, this greater reproductive output caused the genome containing these long-tail genes to out-propagate rival genomes that did not code for such a long tail, so that, eventually, male birds with such long tails came to be regarded as the standard adaptation in the species.

This example can be accommodated by Foot's view, understood in terms of my field biological functional account. The long tail in the male bird of paradise straightforwardly enhances the ability of the individual bird to fulfill the life function of reproduction, even if it does so while detracting from another life function, that of survival. My field biological functional account holds that the proper functions of parts, features and activities in organisms lie in fulfilling life functions of development, sustenance, defense and reproduction in organisms in their natural habitats. It is quite possible, on my account, that a particular part, feature or property fulfills one life function at the expense of another: With the female green turtles, for instance, their coming onshore to lay eggs fulfills the reproductive function while detracting from the function of survival, since female green turtles are much more vulnerable to predators onshore than in the ocean. The field biological functional account is not committed to the position that organic parts, features and activities cannot function in such a way as to fulfill one life function at the expense of another.

Conclusion

Although Fitzpatrick's example does not pose a problem for my field biological functional account, it does raise an interesting issue for Foot's view of goodness. As we saw in the two

preceding chapters, on Foot's view, for an organism to be good as a member of its biological kind is for it to possess what she calls *natural goodness*. Fitzpatrick would be correct in claiming that his example would pose a problem for Foot's view of natural goodness in living organisms, if her view is to be correctly understood as one which holds that for organic parts, features and activities to contribute to an organism's manifesting natural goodness is for them to function in such a way as to contribute to the physical flourishing of the organism, and if, on such a view, contributing to one life function in an organism while detracting from another does not constitute contributing to physical flourishing. This, in turn, brings up further questions: Does my field biological functional account constitute a faithful interpretation of Foot's conception of natural goodness in living organisms? Is the perspective of field biology – and the proper functions that organic parts, features and activities fulfill, on this perspective – really supposed to furnish concrete criteria of goodness in living organisms, on the Foot-Thompson account? Or is Thompson's reference to nature documentary programs (and the field biological perspective upon which they are based) not to be taken literally: Is it, rather, meant as some kind of heuristic device to gesture toward some other kind of criteria?

These are complex questions, and it is not immediately apparent if one can arrive at fact-of-the-matter answers to them from Foot's and Thompson's remarks. However, even if it is uncertain whether my field biological functional account constitutes a faithful interpretation of Foot's view, there is good reason to forge ahead and explore the implications of my account. Whatever the standing of my account as an interpretation of Foot's view, it is still a broadly Aristotelian account. Aristotle, in putting forth his conception of form, articulates a functional account of goodness in living organisms: On his view, there is a unique form (*eidos*) pertaining to every biological kind, and the goodness of parts, features and activities in an organism is

evaluated with respect to whether or not they function in such a way as to contribute to actualizing this form. In a similar vein, I have articulated a functional account of goodness in living organisms: My account holds that, for a particular biological kind, field biology identifies a unique set of parts, features and activities that properly function to fulfill life functions in the organism's natural habitat, and that an organism is a good member of that kind just in case it possesses such parts and features, and engages in such activities. In light of this, then, my account can be deemed to be a naturalistic Aristotelian account, whether or not it is also Footean. There is, then, good reason to consider the implications of such a naturalistic account for moral judgments of goodness in human actions and lives, since both Aristotle and Foot formulated their views of living organisms with a view to laying a naturalistic foundation for both moral and non-moral evaluations. Since I originally put forth my account as an interpretation of Foot's view of goodness in living organisms, I shall accordingly go on to specifically consider the implications of my account for Foot's view of moral evaluations. This will be my focus in the next chapter.

CHAPTER 6
GOODNESS IN HUMAN ACTIONS AND LIVES: AN EXAMINATION OF
HURSTHOUSE'S ACCOUNT

Introduction

In the preceding chapter, I argued that it is possible to articulate Foot's view of goodness in living organisms in terms of a field biological functional account of goodness, and that such a functional account furnishes plausible naturalistic criteria of goodness in living organisms. In this chapter, I turn to examining Hursthouse's work, as set forth in her book *On Virtue Ethics*. My aim in so doing is to determine whether it is possible to draw upon her work to formulate a functional account of goodness in human actions and lives, one that is similar to the functional account of goodness in living organisms I formulated in the preceding chapter. In this way, I evaluate whether a common naturalistic evaluative structure, one that governs both moral evaluations of human actions and lives and non-moral evaluations of plants and animals, can plausibly be formulated on the Aristotelian naturalistic program developed by Foot and Hursthouse.

My conclusion is that a functional Aristotelian account of goodness in human actions and lives based on Hursthouse's work cannot plausibly be formulated. As we have seen, a major aim of Aristotelian naturalism is to articulate common naturalistic criteria of goodness for both moral evaluations of human actions and lives, and non-moral evaluations of plants and animals. This being the case, if an account of goodness in human actions and lives is to contribute to this aim, it must feature criteria of goodness that are explicable in naturalistic terms. As I shall show in what follows, on Hursthouse's account, criteria of goodness in human actions and lives involve an avowedly normative notion that does not admit of naturalistic explication. This being the case, it is not possible to draw upon Hursthouse's work to formulate an account of goodness in human

actions and lives that shares the same field biological naturalistic criteria of goodness as the functional account of living organisms that I formulated in the preceding chapter.

Of course, the fact that an account of goodness features naturalistically inexplicable normative criteria for moral goodness says nothing about the plausibility of the moral judgments that this account supports. It is quite possible that such an account might support normatively plausible moral judgments. In fact, as I shall argue in this chapter and the next, there are good reasons to believe that Hursthouse's account might support moral judgments that are at least prima facie plausible. This being the case, her account would seem to be able to answer what I have identified in chapter 1 as the second and third skeptical worries about Aristotelian naturalism. However, such a normative advantage is procured at a considerable price, since her account secures this prima facie normative plausibility only by deviating from a major aim of Aristotelian naturalism. Moreover, insofar as criteria for goodness are not explicable in naturalistic terms on Hursthouse's account, her account would not be able to address the first skeptical worry. In light of all this, I argue, the overall prospects for Aristotelian naturalism as put forward by Foot and Hursthouse are not very optimistic.

Overview of the Chapter

The work of this chapter can broadly be divided into four stages. In the first part of this chapter, I consider Foot's claims that a common functional evaluative structure governs evaluations of goodness in both plants and animals, on the one hand, and human actions and lives, on the other. I will utilize her claims to set the stage for what follows in the rest of the chapter. In the second part of the chapter, I go on to consider Hursthouse's account. I will show that her account, as it applies to evaluations of goodness in plants and animals, is largely consistent with my field biological functional account of Foot's view of goodness in living organisms. As such, my field biological functional account can accommodate Hursthouse's

account, as it applies to non-moral evaluations of nonhuman organisms. In the third part of the chapter, I examine Hursthouse's claim that virtuous individuals are good human beings because they exercise rationality in the way characteristic of the human species, in a way similar to that in which particular animals are deemed to be good members of their respective species because they carry out activities that are characteristic of their species. I argue that such a claim can be properly made only if we allow for an equivocation between two different senses of "characteristic"; the naturalistic field biological sense that features in non-moral evaluations of plants and animals, and the avowedly normative sense that features in moral evaluations of human actions and lives on Hursthouse's account. This being the case, I argue, common naturalistic criteria for both kinds of evaluations cannot plausibly be articulated, on Foot's and Hursthouse's views. Finally, in the fourth and final part of the chapter, I examine the implications of Hursthouse's account for the overall prospects for Aristotelian naturalism in the face of the three skeptical worries I outlined in chapter 1.

Foot on There Being a Common Evaluative Structure Governing Plants, Animals, and Moral Evaluations of Human Actions and Lives

In the three preceding chapters (chapters 3, 4 and 5) of this dissertation, I closely examined Foot's view of goodness in living organisms. I did this with the aim of assessing whether, on her view, clearly defined naturalistic criteria for goodness in living organisms can be articulated. As I pointed out in chapter 4, the issue of whether or not such criteria can be articulated has important ramifications for the overall plausibility of Foot's larger project. As we have seen, Foot's overarching aim is to utilize non-moral criteria of goodness in living organisms as a naturalistic basis upon which to ground moral evaluations of goodness in human actions and lives. If it should turn out that such criteria cannot be articulated, then Foot's project would not be able to get off the ground, so to speak.

Fortunately, as I argued in the preceding chapter, it is possible to draw upon the biological perspective of field biology in order to articulate such naturalistic criteria. Specifically, I argued that such criteria can be articulated via a functional account of the workings of living organisms based on the perspective of field biology. On such an account, an organism is good as a member of its biological kind if and only if it possesses parts and features and undertakes activities that are good for fulfilling the proper functions associated with the kind. These parts, features and activities fulfill such proper functions if and only if they operate in such a way as to fulfill the life functions associated with the kind. What constitutes fulfillment of these life functions is, in turn, determined by suitably verified field biological hypotheses.

As I have shown in the preceding chapter, such an account is largely consistent with Foot's view of living organisms. This account can also be effectively employed to defend Foot's view against recent challenges from evolutionary considerations. In showing this, I hope to have demonstrated that Foot's view, understood in terms of such a functional account, can hold its own as an account of goodness in living organisms.

Seen in the light of Foot's overarching aim, however, articulating such functional naturalistic criteria of goodness in living organisms is only the first step in a larger enterprise. Now that such criteria have been articulated, we must turn to the issue of the implications of these criteria for moral evaluations of human actions and lives. Foot's view is that ultimately, moral evaluations of human actions and lives and non-moral evaluations of parts, features and activities in plants and animals share a "common structure of evaluation."¹ In light of my functional account of Foot's view of living organisms, the question to ask here is: Can moral evaluations of human actions and lives in Foot's view be spelled out in terms of a functional

¹ Foot, *Natural Goodness*, 40.

account, one that is analogous to the functional account of living organisms developed in the preceding chapter? Is there a way to spell out the “proper functions” of human activities as being to bring about the goal of human flourishing, in a way analogous to that in which we spelled out the proper functions of parts, features and activities of organisms as being to fulfill life functions and bring about the physical flourishing of those-organisms?

I believe that such a line of thought is what Foot has in mind when she speaks of a common structure underlying both moral and non-moral evaluations. Although she does not go on to spell out how her idea can be developed, Foot does indicate in her writings that goodness in both living organisms and human actions and lives is to be understood in terms of a common functional structure. For instance, she writes:

The question is... whether characteristics of humans can be evaluated in relation to the part they play in human life, according to the schema of natural normativity that we found in the case of plants and animals. In favour of this there is the fact that a certain network of interrelated concepts such as *function* and *purpose* is found where there is evaluation of all kinds of living things, including human beings.²

Elaborating on how this common network of interrelated functional concepts may operate in evaluations of plants and animals, on the one hand, and human actions and lives, on the other,

Foot continues:

We are, let us suppose, evaluating the roots of a particular oak tree, saying perhaps that it has good roots because they are as sturdy and deep as an oak’s roots should be. Had its roots been spindly and all near the surface they would have been bad roots; but as it is they are good. Oak trees need to stay upright because, unlike creeping plants, they have no possibility of life on the ground, and they are tall heavy trees. Therefore oaks need to have deep sturdy roots; there is something wrong with them if they do not, and this is how the normative proposition can be derived. The good of the oak is its individual and reproductive life cycle...³

² Ibid., 40.

³ Ibid., 46.

Foot's remarks here are entirely consistent with the field biological functional account of her view that I outlined in the preceding chapter. Deep and sturdy oak roots are good oak roots because such roots help to fulfill the life functions of survival and reproduction in the oak kind. The field biological functional account thus furnishes naturalistic criteria for goodness in oak trees. Individual oak trees are deemed to be good trees of the biological kind if they have parts and features that fulfill life functions, and we can judge that "there is something wrong with" an oak that lacks deep and sturdy roots, since such an oak would not be able to fulfill life functions in its natural habitat, all other things being equal.

It is less obvious how such a functional structure of evaluation can be applied to human actions and lives. Foot seems to be aware of the difficulties of applying such a structure to human actions and lives when she remarks that:

What conceptually determines goodness in a feature or operation [in a plant or animal] is the relation, for the species, of that feature or operation to survival and reproduction, because it is in that that good lies in the botanical and zoological worlds... But clearly this is not true when we come to human beings. Take reproduction, for instance. Lack of capacity to reproduce is a defect in a human being. But choice of childlessness and even celibacy is not thereby shown to be defective choice, because human good is not the same as plant or animal good.⁴

Insofar as human beings are also members of the animal kingdom, a human being who is infertile and thus unable to fulfill the life function of reproduction can be deemed to be defective as a member of the human biological kind. But biological evaluations cannot account for the whole range of evaluations of goodness in human beings, because, unlike plants and animals, human beings are not just biological beings that fulfill life functions. They are also rational beings, beings that undertake actions resulting from conscious choice and deliberation; as Foot's example of the choice of childlessness suggests, a particular human action that actively detracts

⁴ Ibid., 42.

from fulfilling the life functions may yet be deemed to be a good human action. An entirely different set of criteria, then, must apply in evaluating human actions and choices.

In spite of these differences between non-moral evaluations in plants and animals and moral evaluations of human actions and lives, Foot believes it is possible to identify a common evaluative structure underlying both types of evaluations. She claims that just as we evaluate the goodness of parts, features and activities of organisms by looking at whether they operate in such a way as to contribute to the physical flourishing of the organism, there is an analogous sense in which we can evaluate human actions and lives by looking at whether these actions and lives are conducted in such a way as to contribute to human flourishing. In order for human beings to live good human lives, Foot remarks, they need

not only... to be able to house, clothe and feed themselves, but also to pursue human ends having to do with love and friendship. They need the ability to form family ties, friendships, and special relations with neighbours... how could they have all these things without virtues such as loyalty, fairness, kindness, and in certain circumstances obedience?⁵

Humans are more complex beings than plants and animals. They are not merely biological beings that fulfill life functions. As such, the things that human beings need in order to lead flourishing lives go beyond the fulfillment of life functions. In addition to being biological beings, humans are also rational social beings. As such, human flourishing is closely tied to undertaking actions resulting from conscious choice and deliberation – actions which result in such human goods as “family ties, friendships, and special relations with neighbours” – in such a way as to enable the human being to live well within a human community.

If Foot is correct, then despite the great differences between human beings and plants and animals, a common evaluative structure must underlie biological evaluations of plants and

⁵ Ibid., 44 – 5.

animals, on the one hand, and moral evaluations of humans as rational social beings, on the other. Unfortunately, Foot does not go beyond the broad claims mentioned above to put forth any detailed argument for such an evaluative structure.

Hursthouse's Account

In her book, *On Virtue Ethics*, Hursthouse takes over where Foot leaves off. Hursthouse sees herself as developing in more detail Foot's general idea that a common evaluative structure underlies evaluations of both plants and animals and human actions and lives, that "ethical evaluations are analogous to evaluations of tigers (or wolves or bees) as good, healthy specimens of their kind."⁶ In trying to articulate such an overarching evaluative structure, Hursthouse's aim is to – in the words of a recent review by David Copp and David Sobel – "put needed flesh on Foot's rather skeletal proposal."⁷ Specifically, Hursthouse aims to do this by putting forth a hierarchical framework that purports to explain how it is that naturalistic considerations can ground our moral intuitions about the virtues being an important factor in living a good human life.

In putting forth her framework, Hursthouse posits a hierarchy of ends, and she claims that all living beings must fulfill these ends to varying degrees if they are to be good as members of their respective species. Fulfillment (or non-fulfillment) of these ends is evaluated with reference to certain aspects that characterize different kinds of living beings. She begins, as Foot does, by talking about plants and animals. She begins by noting that in evaluating plants, we evaluate them with reference to two aspects – their parts and operations. More specifically, we evaluate whether individual plants are good or bad plants of their species by assessing whether their parts

⁶ Rosalind Hursthouse, *On Virtue Ethics* (Oxford: Oxford University Press, 1999), 197.

⁷ David Copp and David Sobel, 'Morality and Virtue: An Assessment of Some Recent Work in Virtue Ethics', in *Ethics*, 114 (April 2004), 533.

and operations fulfill the ends of (1) individual survival and (2) continuance of the species.⁸

Thus, for instance, other things being equal, we judge an oak tree with strong and deep roots to be a good specimen of the oak species because having such a particular part (and the operation which this part carries out) enables the tree to fulfill the ends of individual survival and continuance of the species.

We also evaluate animals with respect to the same two ends when we are evaluating them as members of their respective species. However, in the case of animals, the picture is complicated by the fact that in order for animals to fulfill these two ends, it is not enough that they have the right parts that operate optimally: They also need to act in certain ways. Thus, it is not enough for a lioness to fulfill the end of individual survival that she has a stomach that operates optimally in digesting the food that she ingests; in order to fulfill this end, she must also actively hunt for prey. In order for her to fulfill the end of continuing the species, she must take the actions of feeding her cubs and teaching them to hunt. Thus, in addition to the two aspects of having certain parts and operations, in evaluating animals as members of their species with respect to the fulfillment of the two ends of survival and continuance of the species, we must take into account a third aspect, that of their actions.⁹

As we ascend the ladder of nature, so to speak, from less complex to more complex life forms, we at some point encounter sentient beings, or animals with the ability for pleasure and pain. In evaluating such animals as members of their species, we need to evaluate them not only with respect to the two ends mentioned above, but also with respect to a third end, namely, that of (3) characteristic freedom from pain and characteristic pleasure and enjoyment.¹⁰ The

⁸ Hursthouse, *op. cit.*, 198.

⁹ *Ibid.*, 199.

¹⁰ *Ibid.*, 199 – 200.

emphasis on “characteristic” is important, for it grounds evaluation with respect to this end. The ability to feel (and avoid the source of) pain characteristic of animals of many biological kinds (including human beings) is an important survival mechanism in these animals, so that a particular animal whose nerve endings are damaged in such a way that it can no longer feel pain can be judged to be defective as a member of its species. Conversely, an animal that no longer takes pleasure in eating or reproducing, and thus has no desire to undertake these activities, is also to be deemed a defective member of its species. Insofar as we can ascribe pain and pleasure to these animals, then, we can also ascribe to them “a certain, at least minimal, psychology, of emotions and desires.”¹¹ This being the case, when we evaluate sentient animals as members of their species with respect to this third end of characteristic freedom from pain and characteristic pleasure and enjoyment, we do so with reference to a fourth aspect, that of having certain emotions and desires.¹²

As we move still further up the ladder of nature, we encounter still more complex animals, namely, social animals that live and flourish in packs or tribes. In addition to the three ends mentioned earlier, the parts, operations, actions, emotions and desires of these animals must be evaluated with respect to a fourth end, that of (4) the good functioning of the social group.¹³ It is with this fourth end in mind that we judge a free-riding wolf that for some reason does not join in the hunt to be a defective member of its species. It is also with this end in mind that Hursthouse observes that, within some species of social animals, animals form groups within the species, so that “[t]here are characteristic patterns of fear and anger which differentiate between other members of the group and members of the same species which are not members of the group; a

¹¹ Ibid., 200.

¹² Ibid., 200.

¹³ Ibid., 201.

social animal whose emotional reactions are out of line and disrupt the functioning of the group is thereby defective.”¹⁴

Summing up, on Hursthouse’s account, as outlined in the foregoing, all plants and animals are to be evaluated to varying degrees with reference to the four aspects of their (i) parts, (ii) operations, (iii) actions, and (iv) desires and emotions. We evaluate whether or not they are good members of their respective species by assessing whether the four aspects (or whichever of these four aspects applies to the animal or plant in question) fulfill the four ends (or whichever of these four ends applies to the animal or plant in question) of (1) individual survival, (2) continuance of the species, (3) characteristic freedom from pain and characteristic pleasure and enjoyment, and (4) the good functioning of the social group.

In light of the foregoing, we can see that Hursthouse’s hierarchical account can readily be seen to be entirely consistent with the field biological functional account of Foot’s view of living organisms that I outlined in the preceding chapter. By detailing what living organisms do to fulfill the life functions of development, sustenance, defense and reproduction in their natural habitats, the works of field biologists (and the functional account based on them that I outlined) can be seen to provide scientific support for Hursthouse’s picture of how the four aspects of plants and animals fulfill the four ends in her account. For instance, a field biologist who is studying oak trees might conclude that strong and deep roots fulfill the life functions of development and sustenance in the oak species. Such a conclusion provides scientific support for Hursthouse’s account, since, when such roots operate in such a way as to fulfill the ends of the survival of the individual oak tree and continuance of the oak species on her account, they also fulfill the life functions of development and sustenance in field biology. In a similar vein, a field

¹⁴ Ibid., 201.

biologist might conclude that the characteristic ability to feel and avoid the source of pain found in animals belonging to a particular species fulfills the life function of defense by alerting the animal to the presence of dangerous conditions in the environment. Such a conclusion also provides scientific support for Hursthouse's account, since, on her account, when animals are able to feel and avoid the source of pain in the way characteristic of their species, they fulfill the end of characteristic freedom from pain, and, in so doing, fulfill the life function of defense.

Human Beings as Rational Social Animals

All of this has significant implications for evaluations of human actions and lives, since human beings are also social animals. However, more needs to be done to show how the foregoing account is relevant to human beings, since human beings are a very different kind of social animal than wolves or penguins. Hursthouse recognizes this when she notes that:

Looking back at the evaluations of other living things, we should be struck by the extent to which they depend on our identifying what is *characteristic* of the species (and/or special members of it.) The other [nonhuman] sophisticated social animals have a characteristic life expectancy, characteristic ways of continuing their species, characteristic pleasures, sufferings, and freedom from suffering, characteristic ways of going on in their social group, and it is in the light of what is characteristic of them that they are evaluated. If they are good *x*s, they will, with a bit of luck, be thriving or flourishing in their characteristically *x* way, living well, as *x*s, unless something external to themselves is preventing it. But what, in an analogous way, is characteristic of human beings? We have a characteristic life expectancy, but do we have anything else? ... We might say that, like the other higher mammals, we characteristically enjoy food and suffer when physically damaged; like some of the other sophisticated social animals, we characteristically enjoy company and play, and suffer when solitary or confined. But we do not seem to be pained by and enjoy these things in just the same way as the other animals do (except perhaps for physical damage) because with us, what we think about the food or company, play, solitude, and confinement can make a difference; none of them is as such a characteristic pleasure or source of suffering for human beings... Moreover, when we think of the great range of things that human beings can enjoy – art, literature, sports, mountain climbing, making things, gardening, the acquisition of knowledge... trying to solve problems, being with other animals, to say nothing of hunting, killing, wielding power over other people, inflicting pain and humiliation, rape, pillage, and destruction – how can we retain the idea of *characteristic* pleasures?¹⁵

¹⁵ Hursthouse, op. cit., 218 – 9.

Human lives and communities, then, are so diverse that, unlike in the case of plants and nonhuman animals, for humans there does not seem to be any characteristic ways in which the four aspects of parts, operations, actions, emotions and desires fulfill the ends of individual survival, continuance of the species, freedom from pain and pleasure and enjoyment, and the good functioning of the social group. However, Hursthouse argues, despite this diversity, the hierarchical naturalistic evaluative framework that she has put forth to characterize evaluations of goodness in plants and animals can also be applied to human lives and actions. We can begin to see how this is the case, she argues, when we consider that the great diversity of human lives and communities is “the unsurprising upshot of that very rationality that distinguishes us from the other animals,” so that

[t]he other animals live ‘the way’ they do because it is in their nature to do so; we do not. They cannot contemplate alternatives and decide to change things, or choose to try a new way as we can; they are biologically determined, we are not.¹⁶

In virtue of our rationality, we are not biologically determined by our environment and genetically endowed features and parts in the same way that plants and animals are. Within certain obvious physical and possibly psychological limits, we arguably are able to exercise our free will in determining whether and how we want to change our lifestyles and our living environment. This accounts, on Hursthouse’s view, for the great diversity in human lifestyles and choices. This also means that, in addition to the four aspects of parts, operations, actions, emotions and desires with reference to which we evaluate plants and animals as members of their species, human beings are also to be evaluated with reference to a fifth aspect, that of being rational.¹⁷ Indeed, in human beings, this fifth aspect arguably plays a more fundamental role in

¹⁶ Ibid., 220.

¹⁷ Ibid., 217.

shaping their actions and lives than the other four aspects, since our rationality plays a decisive role in how we individually channel the operations of our bodily parts and functions, our actions and our emotions and desires, so that among those human beings who strive to fulfill these four ends, the ways in which they do so – and the lives and communities that they build in the process – are each uniquely different. But this also means, Hursthouse argues, that despite the great diversity of human lives and communities,

there is something characteristic of human beings, that we do have a characteristic way of going on, but not in the way that is true of the other animals. Their characteristic ways of going on are many and have to be described in detailed terms, specifically related to such things as the acquisition of nourishment, mating, feeding the young, hunting, selecting leaders, etc., and are discovered by observation. Our way of going on is just one, which remains the same across all areas of our life. Our characteristic way of going on, which distinguishes us from all the other species of animals, is a rational way. A ‘rational way’ is any way that we can rightly see as good, as something that we have reason to do.¹⁸

In holding that “a ‘rational way’ is any way that we can rightly see as good, as something that we have reason to do,” Hursthouse is not saying that human beings are justified in acting from any and all reasons stemming from any desires that they may happen to have. She holds that “I cannot just proceed from some premises about what it is reasonable or rational to do to some conclusion that it is rational to act in such-and-such a way, and hence that a good human being is one who acts that way.”¹⁹ This fifth aspect of rationality, like the other four aspects, is also to be evaluated with respect to whether it fulfills the four ends. On Hursthouse’s framework, a human being can only be judged a good human being if she exercises this fifth aspect in such a way as to fulfill the four ends. Hursthouse’s view is that, all other things being equal, a human being who exercises her rationality in such a way as to fulfill the four ends is one who manifests the

¹⁸ Ibid., 222.

¹⁹ Ibid., 224.

“virtues on the standard list,” virtues such as “charity, justice, honesty and courage.”²⁰

Furthermore, on her view, the human being who exercises her rationality in accordance with the virtues exercises it in the way characteristic of humans, and such a characteristic way of exercising rationality results in the fulfillment of the four ends, all other things being equal. This is analogous to the way in which nonhuman animals, in exercising the four aspects in ways that are characteristic of the species, tend to fulfill the four ends, all other things being equal. Hursthouse claims that it is in this way that human actions and lives, though very different in nature from those of animals and plants, are ultimately governed by the same hierarchical naturalistic evaluative structure.

On Hursthouse’s view, then, a virtuous human being, **being** one who exercises her rationality in such a way as to adequately fulfill the four ends, is a human being that is flourishing in the rational way that is characteristic of humans. Such a human being is, on her framework, good as a human being, in a way analogous to that in which a plant or animal whose four aspects fulfill the four ends in the ways characteristic of its species is good as a member of its species. It is in this way that, Hursthouse argues, a common naturalistic evaluative structure can be seen to underlie both our non-moral evaluations of plants and animals and our moral evaluations of human actions and lives.

How is the Virtuous Exercise of Rationality the Characteristically Human Way of Exercising Rationality?

As we have just seen, on Hursthouse’s view, the characteristically human way of going on involves exercising rationality in accordance with the “virtues on the standard list.”²¹ Her claim is that a human being who rationally fulfills the four ends in accordance with virtue is to be

²⁰ Ibid., 228.

²¹ Ibid., 228.

deemed a good human being, in a way similar to that in which a wolf that fulfills the four ends in the ways characteristic of the wolf species is to be deemed a good member of the wolf species.

How does Hursthouse argue for this claim? This is an important question, for the answer to this question is crucial to determining whether Hursthouse succeeds in showing that a common naturalistic evaluative structure can be applied to both moral evaluations of human actions and lives, and to non-moral evaluations of plants and animals. If the virtuous exercise of rationality is to be the characteristically human way of going on, there needs to be an argument which can show in naturalistic terms how the virtuous exercise of rationality is central to human flourishing. Such an argument needs to show that the exercise of the virtues is central to human flourishing in a way similar to that in which hunting in packs is central to the flourishing of wolves.

It is no exaggeration, then, to say that the overall plausibility of the Aristotelian naturalistic project as developed by Foot and Hursthouse hinges on whether there is such a naturalistic explication of how the virtuous exercise of rationality is the characteristically human way of exercising rationality. Without such an explication, there would be no way of showing how moral evaluations of human actions and lives are similar in naturalistic and normatively relevant ways to non-moral evaluations of plants and animals. This being the case, there would be no way of fulfilling Aristotelian naturalism's central aim, that of gaining a better understanding of what is involved in making moral evaluations of goodness in human actions and lives by first getting clear about what is involved in making non-moral evaluations of goodness in the cases of plants and animals.

There are two approaches one can adopt in arguing for the claim that the virtuous exercise of rationality constitutes the characteristically human way of exercising rationality. On the first

approach, one argues that the virtuous way is the characteristically human way because, all other things being equal, exercising rationality in accordance with the virtues enables one to fulfill the four ends and the life functions, in a way similar to that in which the wolf's characteristic ways of fulfilling the four ends enables her to be a healthy, physically flourishing member of the wolf species. On this approach, the purported status of the virtuous exercise of rationality as the characteristically human way of exercising rationality can be explicated in straightforwardly naturalistic terms: The exercise of rationality in accordance with virtue constitutes the characteristically human way insofar as acting in accordance with the virtues enables one to fulfill the four ends, all other things being equal. On this approach, then, one can readily show that common naturalistic criteria of goodness apply to both moral and non-moral evaluations of goodness. Specifically, in functional terms, the functional account of living organisms that I outlined in the preceding chapter can be readily transposed to apply to human actions and lives. On this approach, virtuous actions and choices are good for human flourishing because they fulfill proper functions within human life by enabling the human being to fulfill the four ends, just as hunting in a pack fulfills a proper function in an individual wolf because such behavior fulfills life functions in the wolf.

However, the apparent ease with which this approach enables one to naturalistically explicate the role of the virtues in human flourishing is obtained at a considerable price. If exercising rationality in a characteristically human way is simply the way that enables us to fulfill the four ends, all other things being equal, it is hard to see how ethical injunctions can carry any more normative weight than the sort of lifestyle advice commonly given by doctors – advice which, if assiduously followed, would arguably conduce to fulfillment of at least some of the four ends at least as well as living in accordance with the virtues would. Why should the

exhortation to exercise rationality in accordance with the virtues carry any more normative weight than, say, my doctor's advice to eat nutritious meals and get regular exercise, if both are simply recommendations on how one can best fulfill at least some of the four ends?

Hursthouse recognizes this problem with this first approach. To illustrate this problem, she quotes from a paper by Gary Watson:

At best, an objectively well-founded theory of human nature would support evaluations of the kind that we can make about tigers – that this one is a good or bad specimen, that that behavior is abnormal. These judgments might be part of a theory of *health*, but our conception of morality resists the analogy with health, the reduction of evil to defect.²²

Agreeing with Watson, she remarks that when “we speak from a neutral point of view, using a scientific account of human nature... we won't get very far.”²³

Rejecting the first approach, she adopts a different approach in arguing that the virtuous exercise of rationality is the characteristically human way. Hursthouse holds that the characteristically human way of exercising rationality is an “avowedly normative” notion, in a way that our notions of the characteristic ways in which wolves fulfill life functions are not.²⁴ For us human beings, Hursthouse argues, “‘our characteristic way of going on’ is to do what we can rightly see we have reason to do”, and a human being who acts from such good reasons in fulfilling the four ends is a human being who instantiates the “virtues on the standard list.”²⁵ Unlike wolves and penguins, human beings do not simply act to fulfill the four ends. Unlike these non-rational social animals, humans are rational social animals who undertake actions from rational deliberation and choice. This being the case, Hursthouse can be seen to argue, we deem

²² Gary Watson, ‘On the Primacy of Character’, in Owen Flanagan and Amelie Oksenberg Rorty (eds.), *Identity, Character, and Morality: Essays in Moral Psychology* (Cambridge: The MIT Press, 1990), 462.

²³ Hursthouse, *op. cit.*, 193.

²⁴ *Ibid.*, 223.

²⁵ *Ibid.*, 223.

human beings to be good or bad qua human beings not only on the basis of whether they fulfill the four ends, but also on how they exercise their rational faculties in doing so.

There are a few objections that can be raised against this approach. First, it can be argued that if Hursthouse is to be justified in incorporating such normative notions into her account, she needs to be able to validate them on purely naturalistic grounds. The worry is that if such normative notions cannot be validated on purely naturalistic grounds, we would then be merely adopting and re-expressing a certain view of the virtues instead of subjecting it to genuine reflective validation.

Hursthouse is aware of this objection, and responds to it by arguing that it is possible to subject our values (and the corresponding virtues) to reflective scrutiny within the perspective of a particular ethical view, without having first to “throw out every ethical belief I have, take what I am left with as certain knowledge... and try to reinstate my ethical beliefs on those foundations.”²⁶ She cites the analogy of Theseus’s ship: Just as Theseus's ship can, over the years, be completely rebuilt piece-by-piece, “without a single plank of the original remaining... in a manner of speaking, we, or our descendants, could look back at the ethical outlook within which we started and condemn it in retrospect as all wrong.”²⁷ The general idea, she continues, “is that I take one of my beliefs – say, that courage is a virtue – and, holding the rest of my ethical outlook intact, put it up for question.”²⁸ In this way, she claims,

[t]he particular judgments that emerged, bit by bit, from reflective scrutiny, within one’s ethical outlook, might well represent a change in that outlook rather than expressing it. And those that were part of the outlook and survived the reflective scrutiny would not

²⁶ Ibid., p. 166.

²⁷ Ibid., 166.

²⁸ Ibid., 167.

merely re-express it; they would now express, so to speak, that they had survived the scrutiny.²⁹

Thus, Hursthouse can be seen to be holding that her approach does allow for meaningful reflective scrutiny and revision of our ethical beliefs, even if such scrutiny and revision might not constitute a validation of the virtues on purely naturalistic grounds.

One problem with Hursthouse's argument thus far is that we do not seem to have good reason to believe that only what Hursthouse claims are "the virtues on the standard list" can be subject to (and survive) such reflective scrutiny. It seems at least possible that other conceptions of what qualities count as virtues can also be subject to (and survive) such scrutiny within their respective ethical views and value-systems. It is quite possible that within these other ethical views, what count as virtues may differ greatly from the virtues on the standard list. For instance, within a community of thieves, being opportunistic may well be regarded as a virtue. When asked to subject this ethical belief that opportunism is a virtue to reflective scrutiny, a member of this community may attempt to validate this purported virtue by arguing that, within such a community, an individual who instantiates the quality of being opportunistic acts from good reasons in fulfilling the four ends. Given the nature of thieves, it can be argued, one simply cannot get by, let alone flourish, within a thief community without being opportunistic. This being the case, the thief may be seen to argue, it would be very unwise not to be opportunistic.

One may argue, in defense of Hursthouse, that this example of a thief community is simply too far-fetched to pose any real problem for her account. There may be a possible world in which thieves form communities, and it may be the case that, given the nature of thieves, actions which instantiate the quality of opportunism would count as actions undertaken from good reasons, relative to such communities. However, it can be argued, there is no reason to think that an

²⁹ Ibid., 166.

Aristotelian account of the virtues should be concerned with what counts as acting from good reasons (and correspondingly, with what might be regarded as virtues) on such distant possible worlds. All other things being equal, thieves do not form communities in the actual world (and probably in the nearby possible worlds). This being the case, the argument goes, what happens in such distant possible worlds have no effect on what counts as acting from good reasons (and on what qualifies as a virtue) in our world.

Even if we concede that this particular example of a thief-community is too far-fetched to have any normative bearing on Hursthouse's account, there is a more general concern about Hursthouse's account, one which may not be so easily brushed off. A rough and ready way to express this concern is by posing the question: Just whose standard list is Hursthouse referring to when she speaks of the "virtues on the standard list"? It is one thing to argue that particular character traits can be subject to reflective scrutiny and validated as virtues within particular ethical views. It is quite another to assume that we should start with a particular "standard list" of the virtues in undertaking such scrutiny. It is not possible, within the constraints of this dissertation, to ascertain whether rational agents universally agree upon particular ways of acting that count as acting from good reasons, and whether a "standard list" of the virtues can, accordingly, be universally agreed upon and validated. Even so, however, it does not seem implausible to hold that, given the diversity of human communities and lives, different individuals or communities would entertain very diverse conceptions of what count as good ways of acting (and as virtues) within their lives and communities. This being the case, the burden of proof would be on the proponent of such a "standard list of the virtues" to argue for the plausibility of there being such a list.

Hursthouse is aware of this general concern about her account, and claims that we are justified in starting with such a “standard list of the virtues” because:

“(1) The virtues [on the standard list] benefit their possessor. (They enable her to flourish, to be, and live a life that is, *eudaimon*.)

(2) The virtues [on the standard list] make their possessor a good human being. (Human beings need the virtues in order to live well, to flourish as human beings, to live a characteristically good, *eudaimon*, human life.)”³⁰

Hursthouse’s basic strategy is to claim that “the proof of the pudding is in the eating.”³¹ On this strategy, she can be seen to argue, it is fruitful to start with these particular virtues rather than any other purported virtues in arguing for a characteristically human way of exercising rationality, because it is possible to show that, all other things being equal, the virtues on the standard list enable us to live flourishing human lives, in a way that other purported virtues might not be able to. All other things being equal, then, she can be seen to argue, one who lives in accordance with the virtues on the standard list is living the best kind of life that a rational social being can aspire to, so that living in accordance with these virtues enables one to flourish in a way that, say, a successful gangster cannot. If Hursthouse is correct, even if a gangster were to be able to fulfill all four ends by instantiating particular character traits that he regards as virtues, and get by reasonably well in this way, he would still have strong reasons for caring about living in accordance with the virtues on the standard list. If living in accordance with the virtues on the standard list is indeed the best kind of life that a rational social being can aspire to,

³⁰ Ibid., 167.

³¹ Ibid., 163.

he would be, in some important sense, not acting in his own best interests and would thereby be less than fully rational if he did not care about living in accordance with these virtues.

Why a Functional Account of Goodness in Human Actions and Lives Cannot Plausibly Be Articulated

Does Hursthouse succeed in showing that one who lives in accordance with the virtues on the standard list is living the best kind of life that a rational social being can aspire to? Or – to extend her pudding analogy – how good does her pudding taste? Before we try to answer these questions, I believe this is a good place to take stock of the situation, so to speak. How does Hursthouse's account, as outlined above, stand with regard to one of the main tasks of this dissertation, that of ascertaining whether common naturalistic criteria of goodness can plausibly be applied to both moral evaluations of goodness in human actions and lives and non-moral evaluations of goodness in plants and animals? Can Foot's and Hursthouse's views of goodness, as outlined in this and the preceding chapters, be explicated in terms of such naturalistic criteria? Can a functional account of goodness in human actions and lives, one that is similar to the functional account of living organisms I outlined in the preceding chapter, be plausibly articulated?

As we have just seen, on Hursthouse's account, the characteristically human way of exercising rationality is an avowedly normative way. Can Hursthouse's account still be considered a naturalistic account if it incorporates such a normative notion? Hursthouse claims that it can. She argues that, even though she has introduced such a normative notion into her account,

it is still the case that human beings are ethically good in so far as their ethically relevant aspects foster the four ends appropriate to a social animal, in the way characteristic of the species... the appeal to just those four ends – really does constrain, substantially, what I can reasonably maintain is a virtue in human beings. I cannot just proceed from some premises about what it is reasonable or rational to do to some conclusion that it is rational to act in such-and-such a way, and hence that a good human being is one who acts that

way. I have to consider whether the corresponding character trait... would foster or be inimical to those four ends.³²

Thus, insofar as whether or not a character trait would foster the four ends plays a central role in determining whether the trait in question is a virtue, Hursthouse argues, she has “preserved the [naturalistic] structure” of her account even though she has introduced a normative notion into it.³³ This being the case, she claims, her account is still properly a naturalistic one.

Whether or not one accepts Hursthouse’s claim that she has preserved the naturalistic structure of her account, it is hard to see how she can incorporate such an avowedly normative notion and still remain true to the larger aims of Aristotelian naturalism. As we have seen, a central aim of Aristotelian naturalism is to gain a better understanding of what is involved in making moral evaluations of goodness in human actions and lives by first getting clear about what is involved in making non-moral evaluations of goodness in the cases of plants and animals. On Hursthouse’s account, criteria of goodness in plants and animals are explicable in strictly naturalistic, field biological terms. The same cannot be said of criteria of goodness in human actions and lives, on her account. As we have seen from my earlier exposition of her account, we cannot make sense of moral goodness in human actions and lives on her account without appealing to the avowedly normative notion of moral virtue, and she does not attempt to explicate this notion in strictly naturalistic terms. Criteria of goodness in moral judgments, then, differ fundamentally from those in non-moral judgments of plants and animals, on her account.

This being the case, her account cannot enable us to gain any **normatively** significant understanding of what is involved in moral judgments by first getting clear about what is involved in non-moral judgments of plants and animals. This is so even though Hursthouse

³² Ibid., 224.

³³ Ibid., 224.

might state that, on her account, it is still the case that a good human being is one who exercises rationality in the characteristically human way, in a way broadly analogous to that in which a good member of the wolf species is one that behaves in the ways characteristic of the wolf species. In light of what we have learnt about Hursthouse's account in the foregoing, this statement can properly be made only if we allow for an equivocation between two different senses of "characteristic", the naturalistic field biological sense that features in the notion of what is characteristic of the wolf species, and the avowedly normative sense that features in what Hursthouse claims is the characteristically human way of exercising rationality.

Insofar as "the characteristic way of going on" refers to two fundamentally different concepts in human beings and nonhuman animals, one cannot successfully appeal to such a notion in order to show that moral evaluations of human actions and lives and non-moral evaluations of plants and animals share a common naturalistic evaluative structure. If anything, any such appeal only underscores all the more sharply the fundamental differences between the two kinds of evaluations. This being the case, we also cannot fruitfully draw upon Hursthouse's account to formulate a functional account of goodness in human actions and lives, one that shows that virtuous actions and choices fulfill "proper functions" in a human life by enabling the human being to lead a flourishing life. It might, in principle, be possible for us to come up with such an account if we ignore the equivocation between the naturalistic field biological sense of "characteristic way of going on" and the avowedly normative sense that applies in Hursthouse's account of goodness in human actions and lives. However, such a functional account, if it can be formulated, would not serve to further the Aristotelian naturalistic program, since it would fail to show that common naturalistic criteria of goodness apply to both moral evaluations of human actions and lives and non-moral evaluations of nonhuman organisms.

Does Hursthouse's Account Succeed in Giving the Gangster Reason to Live in Accordance with the Virtues?

The defender of Hursthouse's account can respond by claiming that it is not really a problem for her account that it does not show that common criteria of goodness in moral and non-moral evaluations can be articulated in strictly naturalistic terms. After all, she might argue, the proof of the pudding is ultimately in the eating: If Hursthouse's account can show, within a broadly naturalistic framework, that a person who lives in accordance with the virtues on the standard list is living the best kind of life that a rational social being can aspire to, she would have succeeded in validating these virtues.

This is an interesting response, and it is only proper that we give it due consideration. Does Hursthouse succeed in showing that the proof of the pudding is in the eating? If a successful gangster and a virtuous person³⁴ both lead lives in which the four ends are fulfilled, how is the latter's life supposed to be flourishing in a way that the former's is not, on Hursthouse's account? Does the virtuous person enjoy a certain sort of happiness that is not experienced by the gangster; a happiness that would give the gangster reason to try to live in accordance with the virtues on the standard list?

As far as I can see, nothing in Hursthouse's work suggests that the virtuous way of fulfilling the four ends yields a special sort of happiness that only the virtuous can experience. Hursthouse acknowledges this when she states that:

Although, if we are fairly virtuous, we and the immoralist do not enjoy, or take delight in, or find satisfying many of the same things, it is a fact, observable by the immoralist, that we really do enjoy ours. He may (if he bothers to think about it) find it strange or risible that our lives manifestly contain 'joy and warmth', and despise us for being content with, from his point of view, so little, but we do not need to tell him that we are enjoying

³⁴ Henceforth, I will use "virtuous person" as a shorthand for "person who lives in accordance with the virtues on the standard list."

ourselves in some arcane sense that he does not grasp – he can see and hear that we are, in a sense he grasps perfectly well.³⁵

If the virtuous person and the successful gangster were to each draw up a list of the things that he finds enjoyable, the items on the two lists would differ greatly from each other. For instance, the virtuous person may take great delight in helping others, whereas the gangster may derive immense enjoyment from threatening and intimidating others. Although the things that the virtuous find enjoyable or delightful are not the same as those that the gangster enjoys, it is not the case, on Hursthouse's account, that the virtuous are enjoying themselves in a way that cannot be grasped by the gangster: The gangster "can see and hear" that the virtuous enjoy helping others in much the same way that he enjoys threatening and intimidating others.

We have no reason, then, to believe that the happiness experienced by the virtuous in carrying out their virtuous activities is of a distinctively different kind from that experienced by the gangster in carrying out his criminal activities. This being the case, one cannot successfully appeal to the quality of the happiness experienced by the virtuous in trying to give the gangster reason to live in accordance with the virtues on the standard list.

Indeed, we can imagine that, if presented with Hursthouse's account, such a gangster would probably deny that he has any reason to try to live in accordance with the virtues on the standard list. Why should he, when he can get by quite happily living his gangster lifestyle? Such an individual, we can imagine, would be someone who fulfills the four ends and gets by quite well in life by being callous, unjust, dishonest and reckless in the ruthless pursuit of his criminal career. He makes more than enough money from his dealings to ensure his personal survival, has more than his fair share of sexual partners to ensure the continuance of the species, and is certainly not lacking in the necessary resources to ensure a reasonably pain-free and enjoyable

³⁵ Hursthouse, *op. cit.*, 185.

existence. He might even be a local philanthropist, setting aside a fair share of his income to contributing to social projects and improving the lot of his community. Even though the charitable projects he invests in benefit his community, he does not undertake these investments out of charity or considerations of social justice. He learnt early on in his career that it pays to do things that benefit one's associates and hurt one's enemies. Insofar as the members of his community give him shelter when he gets into trouble with the law, he considers them his associates. Doing things for his community is, in a way, very much like buying an insurance policy as far as the gangster is concerned: He pays "premiums" to the community when things are going smoothly, so that they will bail him out when times get rough.

The defender of Hursthouse's account might respond by claiming that the person who fulfills the four ends in accordance with the virtues on the standard list acts from good reasons in so doing. This being the case, it might be argued, although the gangster succeeds in fulfilling the four ends, he cannot be said to be acting from good reasons in so doing. Such a response cannot by itself give the gangster reason to adopt the virtuous way of life, unless one can come up with an independent explanation of why acting in accordance with virtue constitutes acting from good reasons. As far as the gangster is concerned, he sees himself as acting from perfectly good reasons in carrying out his criminal activities and living his gangster lifestyle. Indeed, it may very well be that from his perspective, it is the virtuous who are not acting from good reasons, since, on his view, they are either foolish or seriously misguided people who content themselves with too little, and spend too much time and effort helping others; time and effort which could have been better spent, on his view, in the exclusive pursuit of personal gain.

It would not be helpful for the defender of Hursthouse's account to respond by claiming that acting in accordance with the virtues on the standard list constitutes acting from good

reasons because these virtues can be subject to (and survive) reflective scrutiny within a particular ethical view. It is possible that the gangster may subscribe to his own personal view of what character traits are virtues. It is not difficult to imagine that the character traits on his list would differ greatly from those on Hursthouse's standard list: Opportunism and ruthlessness, for instance, would probably be on his list. If he is inclined to philosophical argument, he might even argue that the character traits on his list can be subject to (and survive) reflective scrutiny, just as Hursthouse's list of virtues can.

The defender of Hursthouse's account might claim that acting from virtue constitutes acting from good reasons because, all other things being equal, acting in accordance with the virtues on the standard list plays a central role in leading a life in which the four ends are fulfilled. The general idea is that, even though acting in accordance with the virtues is neither necessary nor sufficient for living such a life, it nevertheless constitutes "the only reliable bet" for doing so.³⁶

Hursthouse accepts the view that living in accordance with virtue constitutes "the only reliable bet" for living a life in which the four ends are fulfilled. She acknowledges that virtue is not necessary for living such a life, "since it is generally acknowledged that the wicked may flourish like the green bay tree."³⁷ She denies that in putting forth the view that the virtues enable human beings to flourish, she is saying that the virtues are necessary for fulfilling the four ends. To illustrate her view, she brings up a medical analogy:

Suppose my doctor said, 'You would benefit from a regimen in which you gave up smoking, took regular exercise, and moderated your drinking.' Her grounds are that that's the way to flourish physically, to be healthy, to live a long, healthy life... Does my doctor's right answer to my question about how I should live claim that following the

³⁶ Ibid., 172.

³⁷ Ibid., 172.

regimen she outlines is necessary for a long healthy life? No, because if it did, it would be readily falsified... To claim that the virtues, for the most part, benefit their possessor, is not to claim that virtue is necessary for happiness. It is to claim that no 'regimen' will serve one better – no other candidate 'regimen' is remotely plausible.³⁸

Nor is Hursthouse claiming that living in accordance with the virtues constitutes a guarantee or sufficient condition of a good human life. Again, she illustrates her view via a medical analogy:

If, despite following [my doctor]'s advice, I develop lung cancer or heart disease or my liver fails, in my youth or middle age, this does not impugn the correctness of what she said... She and I both know that doing as she says does not guarantee perfect health; nevertheless, if perfect health is what I want, the only thing to do is to follow her advice and hope that I shall not be unlucky.

Similarly, the claim is not that possession of the virtues guarantees that one will flourish. The claim is that they are the only reliable bet – even though, it is agreed, I might be unlucky and, precisely because of my virtue, wind up dying early or with my life marred or ruined.³⁹

Hursthouse's claim, then, is that, all other things being equal, living in accordance with the virtues enables human beings to lead flourishing lives, in a way analogous to that in which animals and plants whose four aspects function in a way characteristic of their species lead flourishing lives, all other things being equal. Of course, all other things are not always equal: I might wind up dying young or suffering greatly at the hands of the vicious precisely because of my virtue, as a deer whose legs function well in carrying her away from a pack of wolves might wind up running into an oncoming car on the highway, and die precisely because her legs function in a way characteristic of her species.

The claim that living in accordance with the virtues constitutes "the only reliable bet" to fulfilling the four ends cannot ultimately give the gangster good reason to be virtuous. To begin with, although Hursthouse does hold that living in accordance with virtue constitutes a reliable bet to fulfilling the four ends, she is not claiming that exercising rationality in accordance with

³⁸ Ibid., 172–3.

³⁹ Ibid., 172.

virtue is the characteristically human way of exercising rationality because of this relationship it has to fulfilling the four ends. As we saw earlier, on Hursthouse's account, the characteristically human way of exercising rationality is an avowedly normative notion, one she does not aim to explicate. This being the case, acting from good reasons is also a normative notion, and cannot be explicated in terms of the consequences of virtuous actions on the fulfillment of the four ends.

The defender of Hursthouse's account might nevertheless maintain that, insofar as we all have reason to try to fulfill the four ends, Hursthouse's claim would still constitute a plausible response to the gangster. This is so, she might argue, even if, on Hursthouse's account, acting from good reasons cannot be explicated in terms of the consequences of virtuous actions on fulfillment of the four ends. However, such a response can only be mustered at the cost of a considerable loss of normative import. If one has reason to act in accordance with virtue only because acting in accordance with virtue gives one a reliable shot at fulfilling the four ends, one would have no more reason to act in accordance with virtue than one would have reason to act in accordance with the kind of medical advice that features in Hursthouse's medical analogy, since acting in accordance with such advice arguably conduces just as well to fulfillment of at least some of the four ends. Indeed, we can imagine a successful, health-conscious gangster who does not smoke, eats nutritious meals, exercises regularly, and gets adequate sleep. It is hard to see how such an individual would have reason to live in accordance with virtue, if it is indeed the case that one has reason to act in accordance with virtue only because acting in accordance with virtue gives one a reliable shot at fulfilling the four ends.

Does Hursthouse's Account Need to Validate the Virtues Independently of Any Particular Ethical View?

In light of the foregoing, I conclude that Hursthouse's account does not possess the resources by which one can establish, independently of any particular ethical view, that living in

accordance with the virtues on the standard list enables one to lead the best kind of life that a rational social being can aspire to. As we have seen, it is not the case, on Hursthouse's account, that the virtuous experience a particular kind of happiness peculiar to the virtuous exercise of rationality. There also does not seem to be any independent explanation of why acting in accordance with virtue constitutes acting from good reasons, on her account. This being the case, then, her account cannot establish, independently of any particular ethical view, that living in accordance with the virtues on the standard list is the best way for a rational social being to live.

The defender of Hursthouse's account might respond by claiming that her account does not need to provide such an independent validation of the virtues on the standard list. The virtues on the standard list, it might be argued, are deemed to be virtues on a particular ethical view. Such an ethical view is, in turn, based on a distinctively Aristotelian view of human nature. In the *Nicomachean Ethics*, Aristotle claims that “[w]e have the virtues neither by nor contrary to [our] nature, we are fitted by [our] nature to receive them.” (NE 1103a24 – 6) Commenting on this passage, Hursthouse states that:

To say that ‘we are fitted by nature to receive them’ ... is to say that, having acquired them through the sort of moral education and self-improvement appropriate to rational social animals, we can enjoy their exercise and that other aspects of our morally educated, ‘second’, nature will not still contain recalcitrant aspects at war with our enjoyment of their exercise... It does not just happen to be the case that those character traits which benefit their human possessor, enabling her to live a satisfying and fulfilling life, coincide with those character traits which are the good-making characteristics of human beings. They benefit her in this way *because* of her nature as a human being, the sort of rational social animal that human beings are.⁴⁰

Hursthouse is claiming that, given a certain understanding of human nature, of the way human beings are as rational social beings, it is the case that the virtues on the standard list enable human beings to live flourishing lives in a way that other character traits cannot. If one

⁴⁰ Ibid., 251.

subscribes to (or is at least sympathetic to) this view of human nature, then one might be inclined to hold that there is no need for Hursthouse's account to provide an independent validation of the virtues. If one believes that such an Aristotelian view of human nature is correct, then one would hold that acting from virtue constitutes acting from good reasons simply because one who acts in accordance with virtue acts in the way that is most beneficial to oneself, given the kind of rational social being one is.

Does Hursthouse's appeal to such an Aristotelian view of human nature succeed in absolving her account of the need to provide a validation of the virtues independently of any particular ethical view? I do not think it does. To illustrate my answer, let us return to our successful gangster. There is good reason to believe that he would probably vehemently disagree with Hursthouse's Aristotelian view of human nature. Indeed, he might very well hold a very different view of human nature. On his view, human nature is so inherently egotistical and self-serving that any sort of moral education which inculcates the virtues on the standard list can only distort and pervert human nature, producing defective human beings instead of good ones. Simply presenting the Aristotelian view of human nature to the gangster, then, would not suffice to give him good reason to adopt a virtuous lifestyle. What is needed is a validation of this view of human nature, an explanation of why the Aristotelian view of human nature is the correct view. Needless to say, such a validation, if it is possible, would be an extremely ambitious project. Far from absolving her account of the need to independently validate the virtues, then, Hursthouse's appeal to the Aristotelian view of human nature only shifts the burden of validation to another level.

How does Aristotelian Naturalism Fare in The Face Of the Three Skeptical Worries?

In light of my foregoing exposition and analysis of Hursthouse's account, as well as my exposition and analysis of Foot's views in the preceding chapters, we are now in a position to

consider how Aristotelian naturalism, as developed by both Foot and Hursthouse, stands with regard to the three skeptical worries outlined in chapter 1. Can Aristotelian naturalism answer these skeptical worries?

Let us begin by considering the first skeptical worry. As we recall, the first worry is whether a prima facie plausible set of naturalistic truth conditions can be articulated for both non-moral judgments in nonhuman organisms and moral judgments in human actions and lives. In light of the foregoing, it is clear that Foot and Hursthouse have not succeeded in articulating such truth conditions. As we saw earlier, on Hursthouse's account, moral evaluations of human actions and lives are clearly governed by fundamentally very different criteria of goodness from those that govern non-moral evaluations of plants and animals. Even though both human beings and nonhuman organisms are deemed to be good as members of their respective species if they carry out activities in the way characteristic of the species, "characteristic" activities for both humans and nonhuman organisms are not characteristic in the same sense, on Hursthouse's account. In nonhuman organisms, the characteristic ways of going on can be naturalistically spelled out in terms of field biology. In human beings, the characteristic way of going on is an avowedly normative way, one which cannot be spelled out in field biological terms. Therefore, Foot's and Hursthouse's Aristotelian naturalistic program have not succeeded in articulating common naturalistic criteria of goodness that apply to both moral evaluations of human actions and lives and non-moral evaluations of nonhuman organisms. This being the case, Aristotelian naturalism cannot answer the first skeptical worry.

How does Aristotelian naturalism fare with regard to the second and third skeptical worries? As we recall, the second worry is that even if we are able to articulate such naturalistic truth conditions, it is still an open question whether these conditions would support moral

judgments that are consistent with our deeply cherished moral beliefs. Will these truth conditions deem particular kinds of individuals (such as gangsters) that we intuitively consider unwholesome characters to be bad qua human beings? The third worry is that even if these truth conditions support moral judgments that are consistent with our deeply-held moral convictions, it is not clear whether the resulting moral theory would be able to explain the intelligible connection between these judgments and what we have reasons to do as individuals. Even if it can be shown that according to these conditions, being a gangster is incompatible with being a good human being, it is still an open question whether the resulting moral theory can satisfactorily explain why we would then have reason to act in accordance with the judgments supported by these conditions, and care about living good human lives rather than living, say, successful gangster lives.

Depending on whether one holds that common criteria of goodness in both human beings and nonhuman organisms must be explicable in strictly naturalistic, field biological terms on an Aristotelian account of the virtues, one would arrive at different conclusions about whether Aristotelian naturalism successfully answers the second and third skeptical worries. If one holds that such common criteria of goodness need to be explicable strictly in field biological terms, one would have to conclude that Aristotelian naturalism as developed by Foot and Hursthouse fails to answer both the second and third worries. If an Aristotelian account of the virtues needs to have such strictly naturalistic criteria of goodness, then an account like Hursthouse's would not be a viable Aristotelian account, and would thus not be in a position to address the second and third skeptical worries.

On the other hand, if one holds that such common criteria do not need to be explicable in strictly naturalistic terms, Aristotelian naturalism's position with regard to these two worries

might be more promising. Whether it fulfills this promise, however, ultimately depends on whether the Aristotelian view of human nature can be validated. If, like Hursthouse, one subscribes to the Aristotelian view of human nature, then the gangster would be quite straightforwardly a defective human being, since, on this view, he would be failing to act in his own best interests, given the kind of rational social being that he purportedly is. On this view, we would also have good reason to care about living lives in accordance with the virtues on the standard list rather than successful gangster lives, since we would otherwise be failing to act in our own best interests, given the kind of rational social beings we are. It might seem, then, that if we were to hold that criteria of goodness on an Aristotelian account do not need to be explicable in strictly naturalistic terms, Hursthouse's account would quite readily answer the second and third skeptical worries. In light of the considerations in the preceding section, however, we must acknowledge that this is a viable move only if the Aristotelian view of human nature is the correct view.

Conclusion

Thus far, Aristotelian naturalism's prospects do not seem very good. As we have seen, Aristotelian naturalism cannot answer the first skeptical worry. Although it seems like it might do better against the second and third worries, the answers it can provide to these two worries are ultimately dependent on the plausibility of the view of human nature upon which it is based, and the verdict in this area is far from clear.

This might lead one to wonder whether Aristotelian naturalism's prospects would have been very different if Foot and Hursthouse had taken a different route in setting forth their accounts. In particular, if instead of incorporating an avowedly normative notion into her account, Hursthouse had taken the strictly naturalistic route, so to speak, and held that criteria of goodness in human actions and lives are explicable in field biological terms, what implications

would this have on the prospects of Aristotelian naturalism in the face of the three skeptical worries? This seems an intriguing alternative for advancing the Aristotelian naturalistic program, not least because if common criteria of goodness in human actions and lives and in nonhuman organisms were to be spelled out in field biological terms, Aristotelian naturalism would readily answer the first skeptical worry. It seems worthwhile, then, for us to examine how such an alternate version of Aristotelian naturalism would fare in the face of the second and third skeptical worries. Such an examination shall be our focus in the next and final chapter of this dissertation.

CHAPTER 7
HOMOSEXUAL POETS, OSTENSIBLY-FLOURISHING CELIBATES AND SUCCESSFUL
GANGSTERS: AN ARISTOTELIAN DILEMMA

Introduction

As we saw in the preceding chapter, the prospects for Aristotelian naturalism as developed by Foot and Hursthouse are not very good. Insofar as the characteristically human way of exercising rationality is an avowedly normative way on Hursthouse's account, common naturalistic criteria for both moral evaluations of goodness in human actions and lives and non-moral evaluations of plants and animals cannot plausibly be articulated. This being the case, Aristotelian naturalism cannot successfully answer the first skeptical worry.

It might seem as if Foot's and Hursthouse's program would do better against the second and third skeptical worries. To begin with, it might seem that, on Hursthouse's account, a successful gangster would be quite straightforwardly a defective human being. If Hursthouse is correct in holding that to act from good reasons is to act in accordance with what she terms "the virtues on the standard list," the gangster can then be seen to be failing to act from good reasons, and would thus fail to act in his own best interests, given the kind of rational social being that he purportedly is. This being the case, Hursthouse's account would readily answer the second skeptical worry. Accordingly, if acting in accordance with virtue constitutes acting from good reasons, we would then have reason to try to live virtuous lives rather than successful gangster lives. Hence, Hursthouse's account can also be seen to successfully answer the third skeptical worry.

However, as I argued in the preceding chapter, this seeming success of Hursthouse's account with regard to answering the second and third skeptical worries is contingent upon the correctness of the Aristotelian view of human nature upon which her view of the virtues is based.

As I argued in the preceding chapter, the task of validating such a view of human nature is a very ambitious one, and it is far from clear what the prospects for such an undertaking are.

The rather less-than-ideal performance of Foot's and Hursthouse's program in the face of these skeptical challenges might lead one to wonder what Aristotelian naturalism's prospects would be like if Foot and Hursthouse had taken a different direction in constructing their accounts. In particular, how would Aristotelian naturalism have fared in the face of the foregoing skeptical worries if, instead of holding the characteristically human way of exercising rationality to be a normative way, Hursthouse had held it to be a naturalistic way, one that can be spelled out in field biological terms? On this alternative way of developing Aristotelian naturalism, one would argue that the virtuous way of exercising rationality is the characteristically human way because, all other things being equal, exercising rationality in this way enables one to fulfill the four ends and the life functions, in a way similar to that in which the wolf's characteristic ways of fulfilling the four ends enables her to fulfill the four ends and the life functions and to be a healthy, physically flourishing member of the wolf species. At least at first glance, such an alternative seems to be an interesting way of developing the Aristotelian naturalistic program: If the characteristically human way of exercising rationality were to be spelled out in strictly naturalistic, field biological terms, then we would have common naturalistic criteria of goodness for both moral evaluations of human actions and lives and non-moral evaluations of plants and animals. This being the case, Aristotelian naturalism would readily answer the first skeptical worry.

In this chapter, I shall examine this alternative in closer detail. In particular, I shall assess how this alternative version of Aristotelian naturalism fares in the face of the second and third skeptical worries. For the rest of this chapter, I am going to call this alternative version of

Aristotelian naturalism Strictly Naturalistic Aristotelian Naturalism (SNAN), as opposed to what I shall call Avowedly Normative Aristotelian Naturalism (ANAN), which is the Aristotelian naturalism developed by Foot and Hursthouse, and which was the focus of our discussion in the first six chapters of this dissertation. I argue that, ultimately, an Aristotelian naturalist is faced with a dilemma. If she chooses to develop Aristotelian naturalism in the avowedly normative way that Foot and Hursthouse have done (which I shall henceforth refer to by the acronym “ANAN”), her account would lack a naturalistic foundation (since it would not be able to answer the first skeptical worry), but it would yield a prima facie plausible moral theory, insofar as it shows some promise in addressing the second and third worries. I say prima facie plausible, because the ultimate plausibility of the theory would depend on whether there is a way to validate the Aristotelian view of human nature upon which it is based. On the other hand, if the Aristotelian naturalist develops her account in the alternative strictly naturalistic way mentioned above (SNAN), her account would have the advantage of being readily able to answer the first skeptical worry. However, I argue, this advantage is obtained at a considerable price. As I shall show, the resulting moral theory would fail to show that particular individuals (such as the successful gangster) whom we consider unwholesome characters are bad qua human beings. In fact, the theory would also deem particular individuals that we consider upstanding individuals of our communities to be bad qua human beings. Accordingly, we would have little reason to endorse and live in accordance with the judgments supported by such a theory. Therefore, I argue, SNAN fails to answer the second and third skeptical worries.

SNAN in the Face of the Second and Third Skeptical Worries

As I mentioned above, SNAN readily answers the first skeptical worry. On SNAN, we have a straightforwardly naturalistic foundation for an Aristotelian account of the virtues, and it seems reasonable to believe that such a foundation would support a determinate set of moral

judgments about human actions and lives. It remains to be seen how SNAN would fare in the face of the second and third worries. Gary Watson voices these worries when he questions:

Even if we grant that we can derive determinate appraisals of conduct from an objective description of what is characteristic of the species, why should we care about those appraisals? Why should we care about living distinctively human lives rather than living like pigs or gangsters? Why is it worthwhile for us to have those particular virtues at the cost of alternative lives they preclude? There are two sorts of skepticism here. (1) Can an objective theory really establish that being a gangster is incompatible with being a good human being? (2) If it can, can it establish an intelligible connection between those appraisals and what we have reasons to do as individuals?¹

In putting forth (1) and (2), Watson is expressing what I have identified as the second and third skeptical worries, respectively. He does not go on to make any definitive claims as to whether these worries can be answered, but concludes that, “[t]hese seem to me to be the main worries and issues that must be faced before we can determine the prospects for an ethics of virtue.”²

The Second Skeptical Worry, and the Fundamental Difficulties about SNAN That It Expresses

Hursthouse recognizes the significance of the worries expressed by (1) and (2) in the foregoing passage from Watson’s paper. She addresses (1) after she sets forth her hierarchical naturalistic framework:

[L]et us return to Watson’s question of whether ethical naturalism could establish that ‘being a gangster is incompatible with being a good human being’. If the programme [as set forth in the hierarchical naturalistic framework] can, when pursued in detail, fulfill its promise, then the answer is, ‘Yes, it could (with the addition of some plausible extra premises)’... A gangster is bad qua human being, if he is, because a gangster is, as such, callous, unjust, dishonest, reckless, and thereby lacks charity, justice, honesty, and courage (at the very least). The first move is to validate charity, justice, etc., as virtues – which, I have claimed, looks at least possible. The next move, which comes not from the naturalism but from (putative) knowledge of what sorts of characters gangsters are, is to establish that gangsters are callous, unjust, etc. (the plausible extra premises). These moves together

¹ Gary Watson, ‘On the Primacy of Character’, 463.

² *Ibid.*, 464.

would establish that a gangster was bad qua human being, and thereby unable to live a good human life.³

Whether or not Hursthouse's framework successfully addresses Watson's question (1), and show that being a gangster is incompatible with being a good human being, turns on whether what Hursthouse calls "the first move" of her argument is a defensible move. This is so because "the next move," as she acknowledges, depends not on ethical naturalistic considerations but on putative knowledge of the sorts of characters gangsters are. As we saw in the preceding chapter, on ANAN, one attempts to validate the virtues by arguing that one who acts in accordance with the virtues acts from good reasons, and that to act from good reasons is to exercise rationality in a characteristically human way.

Is there a way to validate the virtues on the standard list, on SNAN? Is there a way to show that, on SNAN, an individual who manifests these virtues in her life is to be deemed to be good as a human being, and that individuals such as the gangster who lack these virtues are bad qua human beings? To put ourselves in a better position to answer these questions, it is worth reconstructing these two moves of Hursthouse's argument in the light of her account as outlined in the preceding chapter. Despite the differences between ANAN and SNAN, I believe that the proponent of SNAN can utilize such a reconstruction to see what needs to be done to validate the virtues on her account. Seen in the light of Hursthouse's account, what she calls the first move of her argument can actually be broken down into several steps:

- (1) A social animal needs to fulfill the four ends of individual survival, continuance of the species, freedom from pain and pleasure and enjoyment, and the good functioning of the social group in the ways characteristic of its species if it is to be good as a member of its species (i.e. if it is to be a flourishing member of its species).
- (2) Human beings are social animals.

³ Hursthouse, *op. cit.*, 228.

- (3) Therefore, human beings need, all other things being equal, to fulfill the four ends in the way/s characteristic of the human species if they are to be good as human beings (i.e. if they are to flourish as human beings and lead good human lives). [From (1) and (2)]
- (4) Human beings have one characteristic way of fulfilling the four ends, and this is a characteristically rational way.
- (5) This characteristic way involves exercising rationality in accordance with the virtues.
- (6) Exercising rationality in accordance with the virtues results in the fulfillment of the four ends, all other things being equal.
- (7) Therefore, all other things being equal, a human being who exercises her rationality in accordance with the virtues is good as a human being (i.e. lives a good human life, is flourishing as a human being). [From (3), (4), (5) and (6)]

The next move in Hursthouse's argument can be reconstructed as follows:

- (8) A gangster, in fulfilling the four ends, exercises his rationality in a way that does not accord with the virtues.
- (9) Therefore, the gangster is not exercising rationality in the way characteristic of the human species. [From (4) and (5)]
- (10) Therefore, the gangster is not good qua human being (i.e. does not live a good human life, is not flourishing as a human being). [From (3), (4) and (5)]

According to the above argument, then, although the gangster fulfills the four ends in a rational way, insofar as each of his activities are calculated to bring about the consequences that constitute fulfillment of the end in question, his fulfillment of the ends does not qualify him as a good human being, because he does not exercise rationality in the way that is characteristic of the human species, i.e. in accordance with virtue. If this argument is not to be a question-begging one, one needs to offer a further explanation of why the virtuous way of fulfilling the four ends – as opposed to, say, the way of the gangster – is to be regarded as the way that is characteristic of the human species. What this explanation is on ANAN is clear in light of the exposition and analysis of Hursthouse's account in the preceding chapter. On ANAN, the characteristically human way of exercising rationality involves acting from good reasons, and insofar as one who fulfills the four ends in accordance with virtue acts from good reasons in so doing, the virtuous

way of fulfilling the four ends is to be regarded as the way that is characteristic of the human species.

Is it possible to come up with an analogous explanation of why fulfilling the four ends in accordance with virtue is the way that is characteristic of the human species, on SNAN? In order to come up with such an explanation, the proponent of SNAN needs to identify a distinctive feature (or set of features) of such a way of fulfilling the four ends. This would have to be a naturalistic feature (or set of features) that sets the virtuous way of exercising rationality apart from other ways (such as that of the successful gangster) and explains why the virtuous way is the way that is characteristic of the human species.

What might such a feature (or set of features) be? The proponent of SNAN could try taking a cue from the wolf species. She could argue that, just as we deem hunting in a pack to be characteristic survival behavior for wolves because such behavior conduces to the fulfillment of the four ends and the life functions in the wolf species, from the perspective of field biology, we also deem the exercise of rationality in accordance with virtue to be the characteristically human way of exercising the rational capacity because this particular way of exercising rationality enables a human being to fulfill the four ends and the life functions, all other things being equal.

Appealing to this alleged analogy between human and nonhuman capacities cannot enable the proponent of SNAN to identify a distinctive naturalistic feature that sets the virtuous way of exercising rationality apart from the way of the successful gangster. This is so, because the successful gangster also exercises rationality in such a way as to fulfill the four ends and the life functions. In order to come up with a plausible naturalistic explanation of why the exercise of rationality in accordance with virtue is the way that is characteristic of the human species, then, the proponent of SNAN must come up with an explanation that does not appeal solely to the

consequences that such a way of exercising rationality has on the fulfillment of the four ends. Such an explanation must also identify a feature (or set of features) that is distinctive of the manner in which the virtuous go about fulfilling the four ends; a feature that allows us to see how such a way of exercising rationality – as opposed to, say, the way of the gangster – is the way that is characteristic of the human species. Are there any further significant differences between the gangster’s own rational, deliberate way of fulfilling the four ends and the way of the virtuous, other than the fact that the latter accords with the virtues on the standard list?

The proponent of SNAN could argue that a further difference between the gangster’s way of fulfilling the four ends and the way of the virtuous lies in the fact that the virtuous person, in fulfilling each one of these four ends, does not do things that go against the fulfillment of any of the other three ends. For instance, in undertaking activities to pursue her personal survival, the virtuous person does not (or at least strives not to) do anything that hinders the optimal functioning of her social group. In this way, the various activities of the virtuous person tend not to fulfill one end at the expense of any of the other three ends. The same cannot be said of the gangster’s activities, it may be argued, since his criminal schemes profit himself (and fulfill the end of his personal survival) at the expense of other members of the larger community (thus compromising the optimal functioning of the community).

The proponent of SNAN might point to the purported fact that the virtuous do not fulfill one of the four ends at the expense of any of the other three as a distinguishing feature of the way of exercising rationality characteristic of the human species. In this vein, she can be seen to argue that, although the gangster can be said to fulfill the four ends in a rational way, insofar as each of his activities are calculated to bring about the consequences that constitute fulfillment of the end in question, his activities really do not fulfill the proper functions that the activities of social

animals need to fulfill, from the perspective of field biology. Even with nonhuman social animals, it can be argued, their activities need to be undertaken in such a way that they do not fulfill a particular end at the expense of any of the other three ends if they are to be deemed to be good as members of their respective species. This is clear from examples such as that of the free-riding wolf, who is deemed to be a defective member of the wolf species at least in part because she fulfills the end of personal survival at the expense of the optimal functioning of the pack. Insofar as a human being is a social animal, the argument goes, she cannot be deemed to be good as a human being from the perspective of field biology if, like the gangster, she fulfills one of the four ends at the expense of any of the other three.

It is in this way that the proponent of SNAN might appeal to field biology in an attempt to explain why the virtuous way of exercising rationality constitutes the way that is characteristic of the human species. From a field biological perspective, if an individual social animal is to be good as a member of her species, she needs to exercise her capacities and carry out activities in such a way that she does not fulfill one end at the expense of any of the other three. This is true both of the wolf, who needs to exercise her survival capacity in such a way as to bring about her personal survival without compromising the optimal functioning of her pack, and of the human being, who needs to exercise her rational capacity in such a way that she does not fulfill one of the four ends at the expense of any of the other three. Seen in this light, the proponent of SNAN might be seen to argue, the exercise of rationality in accordance with the virtues constitutes the way of exercising rationality that is characteristic of the human species because it is only when the rational capacity of the individual is exercised in this way that a necessary condition for being good as a social animal can be fulfilled.

Such a defense of virtue is a highly problematic move, one that ultimately raises at least as many difficulties as it purports to address. For one, it is not clear that only the virtuous can exercise rationality in such a way as to avoid fulfilling one end at the expense of any of the other three. We can imagine a gangster – a sort of modern-day Robin Hood – who only targets as victims of his schemes people who have accumulated wealth through unjust means, and who then invests a substantial portion of the revenue from these schemes into charitable projects that benefit the community. If he were to hear about the purported fact that the virtuous fulfill each of the four ends without undermining any of the other three, he might respond along these lines, “I might not be a virtuous person, but in fulfilling each of the four ends, I do not undermine the other three! I am not virtuous: I lie, cheat and steal in order to accomplish my schemes, I have no compunctions about killing or seriously injuring anyone who stands in the way of my schemes, and I have far too many sexual partners at any one time to be temperate in my sexual appetites. And even though the charitable projects that I invest in actually benefit my community, I do not undertake these investments out of charity or considerations of social justice. I learnt early on in my career that it pays to do things that benefit one’s associates and hurt one’s enemies. Insofar as the members of my community give me shelter when I get into trouble with the law, I consider them my associates. Doing things for my community is, in this sense, very much like buying an insurance policy as far as I am concerned: I pay ‘premiums’ to the community when things are going smoothly, so that they will bail me out when times get rough. But my activities do not really undermine the optimal functioning of the community. The people from whom I steal have obtained their wealth from the community through unjust means. By stealing from them and then reinvesting this wealth back into the community, my so-called criminal activities actually have the effect of bringing about a more equitable distribution of wealth in the community. In this

way, these activities actually contribute to the optimal functioning of the community, even if they are not motivated by any virtuous intentions.”

It is not apparent, then, that there is only one particular way of exercising rationality ~~in~~ such ~~a way~~ that one does not fulfill one of the four ends at the expense of any of the other three, much less that that particular way has to be the way that accords with virtue. The foregoing example of the Robin-Hood-type gangster suggests that the virtuous do not have a monopoly with respect to fulfilling all of the four ends without undermining any of them. It might very well be the case that there are many different ways by which both virtuous and non-virtuous human beings can fulfill all of the four ends without undermining any of them, if they exercise sufficient ingenuity in the context of their particular life-circumstances. This being the case, then, there is no justification for pointing to such a manner of fulfilling the four ends as the distinctive feature that allows us to single out the virtuous exercise of rationality as the way of exercising rationality that is characteristic of the human species. Indeed, as I shall show with my hypothetical example of a heroic seventeen-year-old later in this chapter, there are cases in which acting from virtue demands precisely that one fulfill one of the four ends at the expense of one or more of the others.

In light of the foregoing, then, SNAN does not succeed in answering the second skeptical worry. As we have seen, Aristotelian naturalism holds that being a gangster is incompatible with being a good human being because the gangster does not fulfill the four ends in the way that is purportedly characteristic of the human species. If this claim is to be substantiated on SNAN, what is needed is a naturalistic explanation of what constitutes the characteristically human way of fulfilling the four ends. As we see from the foregoing, however, a plausible way of making good on this claim does not seem to avail itself. While this does not entail that there is no way

for the proponent of SNAN to make good on this claim, it nevertheless places a substantial burden of argument on her to do so; until such a burden is discharged, SNAN cannot succeed in answering the second skeptical worry.

The failure of SNAN to answer the second skeptical worry is symptomatic of fundamental difficulties with this approach to developing Aristotelian naturalism. I believe that when the skeptic questions whether being a gangster is compatible with being a good human being, she is actually giving voice to a more fundamental worry about Aristotelian naturalism than simply questioning whether particular characters would be deemed to be good human beings on an Aristotelian account of the virtues. I believe the underlying worry is that it is not obvious that fulfilling the four ends in a particular way constitutes an essential component of human flourishing, as Aristotelian naturalism holds.

Indeed, it might not even be apparent that fulfilling the four ends is always necessary for living what most of us would intuitively consider good human lives. It is at least conceivable that there are individuals whom we would consider to be living good human lives, who nevertheless do not fulfill one or more of the four ends. One such individual might be a successful, well-published homosexual poet who subscribes to some rather unusual attitudes and views. For one, she happens not to like children. She does not dislike children; she simply does not particularly like them, not least because they tend to be loud and rambunctious, and are often a source of distraction at the coffee shop where she writes most of her poetry. In addition to her attitude towards children, she also holds the curious belief that the universe will come to an end on the very day she passes from this world. She came to hold this belief after having a vivid hallucinatory episode as a child, in which she had a vision of the universe coming to an end on the day of her death. She has held firmly to this belief since then, and no amount of education

after that point could alter her conviction: After all, none of the other people or institutions who tried to change her views had ever had that particular vision, and she considers herself to be somehow privy to this special piece of insight about the future of the universe. Because of this belief, she does not contribute to or support causes that purport to bring about long term benefits for the environment, or which purport to benefit people who live beyond her generation. After all, as far as she is concerned, these are lost causes: If, as she believes, the universe is going to come to an end on the day she dies, there would not be any truly long term environmental effects or human welfare to consider.

Despite holding what many of us may consider a very bleak and depressing view of reality – one founded upon a set of beliefs about the universe that are, at best, epistemically irrational – our poet nevertheless possesses a cheerful, upbeat attitude in the overall conduct of her career and personal life. She has long accepted as true her belief that the universe is going to end on the day of her demise, and since, on her view, nothing she or anybody else can do is going to alter this supposed eventuality, she has long resolved to enjoy and make the most of what the world has to offer while she is able to. Contrary to what one might expect, then, living with the belief that the universe will end with her demise does not negatively affect our poet's overall emotional state, and her belief thus does not detract from this aspect of her quality of life.

Such an individual arguably does not fulfill the end of continuance of the species. Being homosexual, she will not be having any biological children, and her lack of affection for children in general means that she has no plans to adopt any children, or actively do anything to promote the well-being of children around her. Her belief that the universe will end with her passing also gives her no motivation whatsoever to do anything that might contribute to the longer-term survival and continuance of the human species. However, despite her failure to contribute to the

continuance of the species, she amply fulfills the other three ends, and leads a life that is, to all appearances, a rewarding and flourishing one. She makes more than enough money from her writing career to ensure her personal survival, and is not lacking in the necessary resources to ensure a reasonably pain-free and enjoyable existence. Her works are widely read and enjoyed by many in her community, and, in this way, she can be seen to contribute to the good functioning of the social group through her literary career. Individuals such as this eccentric homosexual poet might, then, give one reason to believe that fulfilling the four ends is not necessary for human flourishing.

Drawing on this example of the eccentric homosexual poet, one can argue that, because of our rationality, our success in leading flourishing lives is not biologically determined by our environment and genetically endowed features and parts in the same way that the success of plants and nonhuman animals is. Unlike plants and nonhuman animals, for which the presence or absence of particular environments and genetic features plays a decisive role in determining whether or not the particular organism flourishes, our rationality arguably accords us considerable autonomy from such environmental and genetic considerations: Those of us (like the homosexual poet) who find ourselves in unusual life-circumstances can still rise above these circumstances by exercising our rational abilities in ways that allow us to flourish in spite of these circumstances. This being the case, then, human beings not only are free to exercise their rationality to fulfill the four ends in ways that are much more diverse and complex than nonhuman animals; in at least some cases, such as that of the eccentric homosexual poet, human beings can also exercise their rationality in such a way as to be able to flourish without having to fulfill one or more of the four ends.

It seems, then, that rationality makes it at least possible that particular human beings – such as the eccentric homosexual poet – can lead flourishing lives without having to fulfill one or more of the four ends. In addition to calling into question the relationship between the four ends and human flourishing, rationality also calls into question the relationship between the virtues and fulfilling the four ends. It does not take too much moral imagination to come up with cases in which virtue demands precisely that one forgo the fulfillment of one of the four ends. Consider, for example, the following hypothetical story of a seventeen-year-old who took up arms to defend his country against an unjust invasion by a neighboring country, and who found himself in a situation in which the virtuous thing to do was to sacrifice his life so that the rest of his group might survive and continue to resist the invaders.

Before we get into the story proper, a few background details about the individual which are relevant to the issues we are considering need to be supplied. Prior to becoming a resistance fighter, this individual grew up in a socially conservative family and was surrounded by friends who shared the same socially conservative outlook. He also went to schools that essentially reinforced these socially conservative values, and lived his whole life endorsing these values. This being the case, this individual had no sexual experience of any sort throughout his life, since among other things, having any sort of sexual experience outside of marriage goes against these values.

Let us now turn to the story proper. In the course of an intense battle, the group of freedom fighters of which the individual was a part found itself forced into a narrow gorge by a much larger group of enemy soldiers. The enemy forces radioed for air support, and enemy dive bombers were already on the way to the scene. The group was only equipped with small arms, and had no reasonable chance of effectively resisting and surviving the attacks of the dive

bombers. There was a path that led out of the gorge, but the path was a narrow one, and could not allow the entire group to make enough progress to exit the gorge before the bombers arrived. The only way the group could escape annihilation was if one person stayed behind in the gorge and launched a series of smoke bombs while the rest of the group made its way along the path. The smoke screen created by the smoke bombs would obscure the vision of the dive bomber pilots, making it difficult for them to pinpoint the location of and target the group members, thus buying the group members valuable time to make their way up the path and out of the gorge. The person who stayed behind to operate the smoke bombs would put himself in a much more vulnerable position than the rest, since he would probably still be in the gorge when the smoke cleared, and would then be an easy target for the bombers. As it turns out, the seventeen-year-old individual volunteered for this highly dangerous task of launching the smoke bombs, and was killed by the bombers as a result of this.

It can be argued that, in the course of his short life, such an individual had fallen short in fulfilling the end of the continuance of the species. To begin with, he had no children, nor did he make any attempt to produce any. In addition, his final act of self-sacrifice excluded any future possibility of his doing anything to continue the species. Insofar as virtuous activity is activity that contributes to the fulfillment of the four ends, we would have to conclude that, all other things being equal, the many activities carried out by the seventeen-year-old over the course of his life were in some significant way lacking in virtue. Such a conclusion would be especially true of his final act of self-sacrifice, since such an act effectively ruled out any future possibility of his fulfilling the end of the continuance of the species. But such a conclusion seems implausible: I suspect that, far from deeming this person to be lacking in virtue, most of us

would, if anything, regard him as a heroic individual who has exemplified to a high degree the virtues of courage and devotion to a worthy cause.

Individuals such as this heroic seventeen-year-old – and there probably are individuals in the actual world whose circumstances are sufficiently similar to evoke the same moral intuitions – might, then, give us reason to question the contributive relationship that is supposed to hold between virtue and fulfillment of the four ends, on SNAN. It seems that, for individuals who find themselves in such circumstances, virtue would demand precisely that they take actions that go against the fulfillment of the four ends.

The proponent of SNAN can respond by arguing that our seventeen-year-old hero is still to be regarded as a virtuous person, even if the actions he took did not fulfill one of the four ends. She might concede that it is true that, from a field biological perspective, a virtuous activity contributes to fulfillment of the four ends, all other things being equal. However, she might go on to argue, all other things are not always equal: Exceptional circumstances can arise in which virtue demands precisely that one forgo the fulfillment of one or more of the four ends. Our seventeen-year-old hero's circumstances are precisely such exceptional circumstances, the argument goes. This being the case, the actions of the seventeen-year-old hero are still to be deemed to have fulfilled proper functions in his life, and he is still to be regarded as a virtuous person even though he failed to fulfill all of the four ends.

In putting forth such an argument, the proponent of SNAN is holding that acting in accordance with the virtues is the characteristically human way of exercising rationality, and that exercising rationality in such a way demands that the agent forgo the fulfillment of the four ends in exceptional circumstances. This is true even if, all other things being equal, virtuous activity

contributes to the fulfillment of the four ends: Exceptional circumstances, the argument goes, are those in which all other things are not equal.

In order for such an argument to work, the proponent of SNAN needs to furnish an explanation of what constitutes the characteristically human way of fulfilling the four ends, since such an explanation is indispensable if she is to possess consistent criteria for demarcating circumstances that are exceptional. As we saw with the case of the successful gangster, however, a plausible way of furnishing such an explanation does not seem to avail itself. This being the case, then, there also does not seem to be a way by which she can consistently pick out those exceptional circumstances in which individuals are to be deemed virtuous even though they fail to fulfill one or more of the four ends.

Why Practicing Homosexuals are Defective Human Beings on SNAN

Are there other ways the proponent of SNAN can respond to the difficulties that such cases as those of the eccentric homosexual poet and the seventeen year-old hero pose for her account? Can she adequately address the skeptical worries raised by these cases concerning the role that the four ends play in her account? At this point, it might be helpful for us to briefly examine how ANAN purports to address these difficulties, and whether it succeeds in doing so. Through this examination, we can ascertain whether SNAN might possibly be able to adopt a similar strategy to tackle these difficulties.

In her work, Hursthouse attempts at some length to address worries along these lines. With regard to homosexuals and the end of the continuance of the species, for instance, she remarks that,

the presence of the end of the continuance of the species continues to worry people. Does it not, they wonder, guarantee that, according to this form of naturalism, practicing homosexuals are all, in that respect at least, bad, defective human beings? The answer is that it does not, not without the addition of a hefty premise or two.

It must be recalled again that what is at issue is not a particular form of sexual activity or orientation, but character traits, and by long-standing tradition we have words for the sort of character who pursues sexual gratification as an end in itself, regardless of other considerations, who chafes at all abstinence, whose enjoyment is unaffected by the wishes of his partner, and the sort of character who, while not insensible to sexual pleasure, pursues it and enjoys it in a much more restricted and discriminated way. The former is licentious, the latter temperate (with respect to sex). Like the other virtues on the standard list, temperance (with respect to sex) looks as though it, rather than licentiousness, might well emerge as a virtue when evaluated in the light of the four ends. (Temperance with respect to sex is not inimical to reproduction and, in contrast to licentiousness, fosters the nurture and education of the young. The temperate enjoy themselves as much as the licentious do, albeit in different ways... and it is temperance that helps to protect us and the good functioning of society from the violent passions that, in human beings, sexual activity tends to give rise to. Nowadays and perhaps for the foreseeable future, it also fosters our individual survival by helping us to avoid fatal sexually transmitted diseases.) So let us suppose that, according to naturalism, temperance with respect to sex is a virtue. Then any human being who lacks such temperance is, in that respect at least, bad *qua* human being.

But clearly, any further step towards the conclusion that practicing homosexuals were, in respect of their homosexuality, ethically bad or defective human beings would require a substantial premise about what practicing homosexuals were like, or one about temperance and/or licentiousness. It would have to be said, for example, that practicing homosexuals were all wildly, willfully, promiscuous (and thereby licentious and thereby lacking in temperance). Or it would have to be specified that anyone who went in for sexual activity with their own sex was *thereby* lacking in temperance or *thereby* licentious (albeit not in the usual way). And wherever such premises come from, they do not come straightforwardly from the naturalism. (The former, I take it, comes from prejudiced ignorance, the latter from the further premise that homosexuals pursue sexual satisfaction in willful defiance of the recognizable function of sexual activity ordained by God.) In particular, they do not come from its reliance on the end of the continuance of the species as forming part of the criterion for a character trait's being a virtue.⁴

Hursthouse's response, then, is that in order for it to be the case that, on her account, practicing homosexuals are all defective or bad *qua* human beings in light of the end of the continuance of the species, it would have to be the case that, on her account, (i) temperance with respect to sex is a virtue (presumably because such temperance better fulfills the four ends, especially the end of the continuance of the species, than licentiousness), and (ii) practicing homosexuals are lacking in temperance, either because all practicing homosexuals are wildly, willfully

⁴ Hursthouse, *op. cit.*, 214 – 5.

promiscuous, or because there is something about the very nature of homosexual sexual activity that is intemperate or licentious. There is no plausible, unprejudiced way to make the claim that all practicing homosexuals are promiscuous, and there seems to be no way to substantiate the claim that homosexual sexual activity is intemperate or licentious in nature without subscribing to definitions of licentious behavior – for instance, the definition that licentious sexual behavior is behavior that is undertaken “in willful defiance of the recognizable function of sexual activity ordained by God” – that fly in the face of commonly accepted notions of what constitutes licentious behavior. This being the case, Hursthouse argues, her account does not entail that practicing homosexuals are bad qua human beings.

Hursthouse’s response might have at least some initial plausibility in assuaging worries along these lines. Insofar as her attempt to validate the virtues on the standard list can be argued to have at least prima facie plausibility, she can be seen to have at least succeeded in showing that homosexual sexual activity does not fall short of one of these virtues. Even so, however, it still seems straightforwardly true that homosexual sexual activity runs afoul of the end of the continuance of the species, insofar as it is physically impossible for such sexual activity to produce offspring. It is not clear whether and how ANAN can allow for the possibility that certain activities which are deemed to be in accordance with virtue may yet fall short in fulfilling one or more of the four ends.

If ANAN’s performance in addressing these worries is ultimately inconclusive, then SNAN is in a much worse position with respect to its ability to address these worries. As mentioned above, it seems straightforwardly true that homosexual sexual activity runs afoul of the end of the continuance of the species. If, on SNAN, for a human being to be virtuous is for her to fulfill the four ends in the way characteristic of the human species, practicing homosexuals

would accordingly be deemed to be defective human beings who are lacking in virtue, since their sexual activities fail to fulfill one of the four ends. Another way of making the same point is by referring to the reconstruction of Hursthouse's argument I put forth earlier in this chapter. Premises (1), (2) and (3) in that reconstruction indicate that, if an individual is to be good as a human being, she needs to fulfill the four ends in the ways characteristic of the human species. All other things being equal, heterosexual sexual activity fulfills the end of the continuance of the species in the human species, since such activity tends to result in the production of offspring, all other things being equal. Insofar as it is physically impossible for homosexual sexual activity to bring about offspring, such activity fails to fulfill the end of the continuance of the species, and a practicing homosexual would be defective in this respect, on this argument. It might be objected that a homosexual might engage in some heterosexual sexual activity "on the side," and in this way fulfill the end of the continuance of the species. It is important to note, however, that in such a case, she can be deemed to have fulfilled the end of the continuance of the species only insofar as she engages in heterosexual sexual activity.

In addition to biological reproduction, there are also other ways human beings fulfill the end of the continuance of the species, and a practicing homosexual might perhaps try to "make up for" her deficiency in these ways: She might, for instance, adopt children, or she might contribute to the well-being of children in various ways (for instance, by baby-sitting her friends' children, or by volunteering at a local day-care center). However, individuals such as our eccentric homosexual poet, who would not be inclined to do anything to "make up" for her deficiencies, would still fall short of fulfilling the end of the continuance of the species, and would, accordingly, be a defective human being on SNAN.

The Third Skeptical Worry, and the Difficulties in SNAN That It Reveals

As I have argued in the foregoing, SNAN does not succeed in establishing that being a gangster is incompatible with being a good human being, and thus it fails to answer the second skeptical worry. This failure also brings to the surface certain intractable difficulties with SNAN. These difficulties would persist even if the proponent of SNAN were to come up with a plausible explanation of what constitutes the characteristically human way of fulfilling the four ends and succeed in showing that, on SNAN, being a gangster is in fact incompatible with being a good human being. Insofar as SNAN would still be committed to the position that being a good human being involves (a) fulfilling the four ends, and (b) doing so in a way that is characteristic of the species (whatever this might amount to), it would still turn out, on SNAN, that upstanding homosexual members of our communities, as well as youths whom we would consider to exemplify particular virtues to a high degree, would be bad qua human beings. Indeed, insofar as SNAN is committed to (a) and (b), an otherwise upstanding homosexual member of our community such as the eccentric homosexual poet would arguably turn out, on SNAN, to be worse qua human being than a successful gangster: A successful gangster at least fulfills the four ends, albeit in a way that is uncharacteristic of the human species, whereas the homosexual poet is defective as a human being by virtue of having fallen short in fulfilling the end of the continuance of the species.

If, as I have argued, SNAN cannot in fact establish that being a gangster is incompatible with being a good human being, it would not be in a good position to satisfactorily address the third skeptical worry. As we recall, the third worry is that even if a naturalistic account can establish that being a gangster is incompatible with being a good human being, it is still an open question whether an intelligible connection can be established between the evaluations entailed by this account and what we have reasons to do as individuals. If, as we saw, SNAN cannot in

fact establish that being a gangster is incompatible with being a good human being, it would then be even more difficult for the proponent of SNAN to argue that an intelligible connection obtains between the evaluations of her account and what we have reasons to do as individuals, that we nevertheless have reason to care about living virtuous lives ~~rather than living, say, successful gangster lives.~~

Although the second and third skeptical worries are independent worries, the failure of SNAN to adequately address the second worry significantly affects its ability to address the third. As I mentioned earlier, when the skeptic brings up the second skeptical worry, she is giving voice to a more fundamental worry about Aristotelian naturalism than simply questioning whether particular characters like gangsters would be deemed to be defective human beings, on Aristotelian naturalism. I believe that the second skeptical worry is really motivated by an underlying suspicion that Aristotelian naturalism might give rise to appraisals that go against our deeply-held beliefs about what count as virtuous actions, or what kinds of individuals qualify as leading flourishing lives. The suspicion is that, if an Aristotelian account cannot clearly establish that an unwholesome character like a gangster cannot be a good human being, it might very well be similarly ambivalent about other similarly unwholesome characters, and perhaps even deem characters (such as the eccentric homosexual poet) whom we would consider to be upstanding individuals to be bad human beings. The fundamental worry, then, is that an Aristotelian account might give rise to appraisals that go against our deeply-held beliefs about virtue and flourishing; appraisals that we would have little reason to endorse.

We would not be inclined to endorse a particular account of the flourishing life if such an account gives rise to appraisals that strongly conflict with our deeply held beliefs about virtue and flourishing, unless the account gives us sufficient justification for overriding these deeply-

held beliefs. As I argued in the foregoing, SNAN is committed to deeming individuals like the eccentric homosexual poet and the seventeen-year-old hero bad qua human beings because they fall short of fulfilling at least one of the four ends. As we have also seen, these are individuals whom many of us would quite unhesitatingly consider to be individuals who are leading lives of virtue or flourishing lives, despite their unusual circumstances and choices. As it stands, SNAN does not seem to offer any strong reasons for overriding our intuitive favorable judgments of such individuals. The apparent lack of such strong reasons for overriding such deeply-held beliefs also means that there is, correspondingly, little reason for us to heed the appraisals of the resulting moral theory and shape our actions and lives in accordance with them.

The proponent of SNAN can argue that it is really no objection to her account if it turns out that, on her account, particular individuals like the eccentric homosexual poet and the seventeen-year-old hero are bad qua human beings. She can argue that this would only entail that these particular individuals would not have good reason to conduct their lives in accordance with the appraisals of her account. After all, she might go on to argue, the average human being is not an eccentric homosexual poet, and would probably never find herself in the unusual circumstances with which the seventeen-year-old hero was confronted. This being the case, the argument goes, the average human being would have good reason to heed these appraisals implied by the theory, since, all other things being equal, fulfilling the four ends in accordance with the virtues still constitutes “the only reliable bet” for the average human being who wants to lead a flourishing life.

Such an argument might be plausible if we can be certain that only characters who are in what are arguably very unusual life circumstances (such as the eccentric homosexual poet or the seventeen-year-old hero) would be deemed to be defective or bad qua human beings on SNAN.

This argument might be plausible if we can be certain that by and large, human beings live lives which are not afflicted by certain physical or psychological conditions over which they cannot reasonably be expected to have control; conditions which prevent them from fulfilling one or more of the four ends in accordance with the virtues. If it turns out that a significantly large number of human beings are faced with physical or psychological obstacles which effectively prevent them from fulfilling one or more of the four ends in accordance with virtue, then SNAN's claim that fulfilling the four ends in this way is "the only reliable bet" for living a flourishing human life would begin to seem like a highly questionable claim.

It is not possible within the space of this dissertation to determine with any certainty whether a significantly large number of human beings are faced with such obstacles. Notwithstanding this, however, further reflection suggests that one does not have to be in very unusual life circumstances (such as those of the eccentric homosexual poet) in order to be faced with such obstacles. For instance, infertile individuals whose condition is beyond the treatment of contemporary medical science are, at least in a biological sense, defective with respect to the end of the continuance of the species, since they are incapable of biological reproduction. There are ways human beings can fulfill this end other than by biological reproduction, and an infertile individual, like the practicing homosexual, can try to "make up" for her biological deficiency in these ways: She can adopt, baby-sit her friends' children, or volunteer at a local day-care center. Even so, however, it remains true that, insofar as she is biologically infertile, she would still be deemed a defective human being on SNAN in virtue of having fallen short of fulfilling the end of the continuance of the species in this respect.

Another group of humans who would arguably be deemed, on SNAN, to be defective with respect to the end of the continuance of the species are celibate individuals, who do not procreate

not because of physical inability to do so, but by choice. Like infertile individuals, it would seem that, on SNAN, celibates would be deemed to be defective human beings because they do not contribute biologically to the end of the continuance of the species, even though, like infertile individuals, they can make up for their deficiency in various ways. Celibates, however, pose a unique problem for SNAN, one that is quite distinct from the problems posed by infertile individuals or practicing homosexuals. Infertile individuals and practicing homosexuals are defective human beings with respect to the end of the continuance of the species by virtue of medical condition or sexual orientation, both of which are beyond reasonable control by the individual. The celibate, however, in choosing not to procreate, actively makes a life choice that detracts from the end of the continuance of the species, and would be bad qua human being on SNAN by virtue of having made such a choice. As with the case of the eccentric homosexual poet, celibate individuals might give us reason to doubt the necessity of fulfilling the four ends for living a flourishing human life, since there are quite definitely celibates who do not attempt to make up for their deficiency with respect to fulfilling the end of the continuance of the species, but who nevertheless fulfill the other three ends and lead ostensibly flourishing lives. Unlike the eccentric homosexual poet, however, the ostensibly-flourishing celibate's non-fulfillment of this end is a result of rational choice. This being the case, the doubt that the ostensibly-flourishing celibate raises about the plausibility of SNAN is one of a more radical nature than that raised by the eccentric homosexual poet. After all, as I mentioned earlier, one could insist that individuals such as the eccentric homosexual poet, confronted with powerful physical and psychological obstacles beyond her reasonable control, constitute plausible exceptions to SNAN, that, such exceptions notwithstanding, it is still the case that the average human being needs to fulfill the four ends in accordance with virtue if she is to lead a flourishing

life. The ostensibly-flourishing celibate's failure to fulfill the end of the continuance of the species is, however, the result of rational choice. If the ostensibly-flourishing celibate can lead a life that is, to all appearances, a flourishing and rewarding one, despite choosing not to fulfill the end of the continuance of the species, this raises at least the possibility that there are other individuals who can, in their own ways, exercise their rationality in ways that enable them to lead flourishing lives without having to fulfill one or more of the four ends. All other things being equal, such individuals would arguably have little reason to heed the appraisals resulting from SNAN and fulfill the four ends in accordance with the virtues: Why should one go through the trouble of being virtuous and fulfilling the four ends, when one could quite readily flourish without fulfilling all four ends?

Can the Proponent of SNAN Plausibly Argue That the End of the Continuance of the Species is Not Central to Human Flourishing?

It might be observed that all the individuals that I have argued are defective human beings on SNAN are individuals who have fallen short in fulfilling the end of the continuance of the species. This being the case, it would seem that if there is a non-ad-hoc way for the proponent of SNAN to argue that fulfilling the end of the continuance of the species is not as central to human flourishing as it is to the physical flourishing of plants and animals, SNAN would be able to avoid many of the difficulties that I have brought up. If the proponent of SNAN can successfully argue that fulfilling the end of the continuance of the species is not so central to human flourishing, she might then be able to show that it is possible for particular individuals to not fulfill the end of the continuance of the species and still be deemed to be good human beings, on SNAN.

Can such a non-ad-hoc argument be plausibly formulated? I believe that the answer is no. For one, it seems that if the proponent of SNAN is to successfully formulate such an argument,

she would have to come up with some naturalistic explanation of why the end of the continuance of the species is to be deemed to be less central to human flourishing than the other three ends. It is hard to see how such an explanation can be given on strictly naturalistic grounds. If the virtues are supposed to enable one to flourish because they enable one to fulfill the life functions and the four ends, on SNAN, in the same way in which particular parts, features and activities enable plants and animals to flourish physically, it is hard to see how there can be a non-ad-hoc naturalistic basis for holding that fulfillment of one of these ends is less significant for human flourishing than it is for nonhuman flourishing.

Alternatively, instead of trying to come up with a strictly naturalistic explanation, the proponent of SNAN could argue that because human beings are rational beings, they can exercise rationality in such a way as to be able to flourish without fulfilling the end of the continuance of the species in certain circumstances. There are problems with this approach. To begin with, if we allow that it is possible for some human beings to flourish in some circumstances without fulfilling the end of the continuance of the species, it seems that we would also have to allow that it is possible for other human beings to flourish without fulfilling some other end. In particular, it seems that we would have no principled basis for deeming as bad human beings certain anti-social individuals such as criminals, who do not contribute to the end of the good functioning of the social group; after all, many of these individuals are ostensibly rational agents who tailor their actions to effectively achieve their ends, and who get by quite well in so doing. It seems that, on this approach, the proponent of SNAN can hold that such individuals are bad qua human beings only if she holds that such individuals are not acting from good reasons in choosing not to fulfill the end of the good functioning of the social group. But if she makes such a move, she would effectively be

operating with an avowedly normative conception of the characteristically human way of exercising rationality. This being the case, she would effectively have conceded that SNAN cannot work.

Does the Successful Gangster Have a Reason to Be Virtuous?

In light of the foregoing considerations, then, I argue that there is no non-ad-hoc way for the proponent of SNAN to argue that fulfilling the end of the continuance of the species is not as central to human flourishing as it is to nonhuman flourishing. Even if such an argument could be plausibly formulated, however, the case of the successful gangster would continue to pose a problem for SNAN. Let us, then, return to considering the successful gangster.

In a way, the problem that the successful gangster poses for SNAN is the reverse of that posed by individuals such as the ostensibly-flourishing celibate. The celibate would arguably be deemed to be a defective human being on SNAN because she fails to fulfill one of the four ends. On the other hand, the gangster would arguably be judged to be living a good human life on SNAN, even though our common sense moral intuitions disagree with this judgment, because SNAN fails to show that the gangster is not fulfilling the four ends in the way characteristic of the human species. Despite this difference between the two individuals, significant similarities also obtain between them, as far as SNAN is concerned. Like the ostensibly-flourishing celibate, the successful gangster would arguably have little reason to heed the appraisals resulting from SNAN. After all, why be virtuous when one can fulfill all four ends and flourish in one's own uniquely evil way? The third skeptical worry, then, is especially well-founded when applied to the case of the successful gangster: Even if SNAN can show that being a gangster is incompatible with being a good human being (and, as we have seen, it fails to do this), it fails to establish an intelligible connection between its appraisals and what the successful gangster has reason to do as an individual.

That the third worry should turn out to be so well-founded when applied to the successful gangster is especially problematic for SNAN. It can be argued that a chief attraction of a naturalistic account of the virtues lies in its promise of demonstrating that the virtuous life is worth living because one who leads such a life is, in some important sense, living the best kind of life that a rational social being could aspire to. If such an account fulfills this promise, then we can convict somebody who knowingly engages in a life of vice – somebody like our successful gangster – of being, in some important sense, less than fully rational, and of not acting in his own best interests. If I am correct in arguing that the third skeptical worry is quite well-founded when applied to the successful gangster, however, then such a conviction is impossible: If this worry is indeed so well-founded, it looks like the virtuous person can only acknowledge that the gangster's way of life is one that is good for him, given his unique abilities and circumstances, and that he has no reason to try to adopt a more virtuous way of life.

Conclusion

As we have seen, the failure of SNAN to answer both the second and third skeptical worries reveals intractable difficulties with this way of developing Aristotelian naturalism. This failure also threatens the overall credibility of similar Aristotelian naturalistic accounts which purport to show that moral evaluations are similar in some normatively significant way to non-moral evaluations of goodness in plants and animals. In being committed to the view that in order to lead flourishing lives, human beings need to (a) fulfill the four ends, and (b) do so in accordance with virtue, SNAN is unavoidably committed to deeming certain individuals or groups of individuals bad qua human beings. SNAN is committed to deeming individuals defective human beings either when (i) physical or psychological conditions over which they cannot reasonably be expected to have control prevent them from fulfilling one or more of the four ends, or when (ii) they have chosen to lead lives in which they fail to fulfill one or more of

the four ends, or in which they fulfill the four ends in ways that do not accord with virtue. The eccentric homosexual poet, practicing homosexuals and infertile individuals fall under (i), while the seventeen-year-old hero, the ostensibly-flourishing celibate and the successful gangster would fall under (ii). I have also argued that all these individuals would have little reason to heed the appraisals resulting from SNAN and shape their actions and lives in accordance with these appraisals.

All of this leaves us with a rather less-than-appealing picture of the strictly naturalistic Aristotelian vision of the life of virtue. If SNAN is the best that one can do by way of articulating a strictly naturalistic Aristotelian account of the virtues, then we seem to be forced to the conclusion that, on such accounts, the Aristotelian life of virtue, far from being the best possible kind of life that a rational social animal can aspire to, is really a life that only a relatively select group of human beings – those who happen to be fortunate enough not to be beset with certain physical or psychological obstacles, or to be confronted with unusual life circumstances – have reason to try to lead.

Before settling on such a bleak conclusion about the Aristotelian life of virtue according to SNAN, however, there is one further line of argument that the proponent of SNAN can adopt to try to rescue her account from such a conclusion, and it is only appropriate that we give it due consideration. On this line of argument, the proponent of SNAN begins by conceding that it may be true, *ex post*, that one has little reason to try to lead a life in accordance with the virtues if one is either beset with certain physical or psychological obstacles, or is confronted with unusual life circumstances. Even so, however, one cannot know *ex ante* whether one would find oneself in such circumstances. This being the case, one would still have reason *ex ante* to try to lead a life in accordance with the virtues, since, in the absence of knowledge about one's actual life

circumstances, living in accordance with the virtues is still “the only reliable bet” for securing a flourishing life.⁵

Such a line of argument is ultimately implausible, by virtue of the simple fact that even if we are stripped of all knowledge of what our actual life circumstances are, we remain fully rational beings. This being the case, the second and third skeptical worries will inform the rational considerations that we make in the absence of such knowledge in much the same way that they will when we have such knowledge. If there is no plausible way of establishing ex post that being a gangster is incompatible with being a good human being, there is no reason to believe that we would be able to establish this ex ante. Similarly, if we cannot establish ex post an intelligible connection between the appraisals resulting from SNAN and what we have reasons to do as individuals, there is no reason to believe that we would be able to establish this ex ante. If we have little reason ex post to try to lead a life in accordance with the virtues, we would also have little reason ex ante to do so.

My overall assessment of the prospects for such a strictly naturalistic approach to developing Aristotelian naturalism is, then, not an optimistic one. This is so even though SNAN gives us a straightforwardly naturalistic foundation for an Aristotelian account of the virtues, one which is explicable in terms of contemporary biology. Even though SNAN is thus able to answer the first skeptical worry, it does not satisfactorily address the second and third worries, since it cannot be shown to support moral judgments that are in agreement with our moral convictions, and we accordingly have little reason to endorse and act in accordance with these judgments.

It is, of course, possible not to adopt such a strictly naturalistic approach to developing Aristotelian naturalism. One can agree with Hursthouse that a broadly naturalistic account of the

⁵ This line of argument was suggested to me by David Copp.

virtues – one which features avowedly normative criteria for goodness in human actions and lives – would suffice to do the work of explaining why human beings need to be virtuous, given the kind of rational social animals they are. As I argued earlier, such an account seems to be more promising with regard to answering the second and third skeptical worries. These advantages with regard to addressing the second and third worries are, however, obtained at the price of compromising a central aim of Aristotelian naturalism, that of gaining a better understanding of what is involved in moral judgments of human actions and lives by first getting clear about what is involved in non-moral judgments of plants and animals. Since, on Hursthouse’s account, the avowedly normative notion of moral virtue cannot be explicated in strictly naturalistic terms, one cannot hope, on such an account, to gain any normatively significant understanding of moral evaluations of human actions and lives by getting clear about what is involved in non-moral evaluations of nonhuman organisms.

The Aristotelian naturalist, then, is faced with an unenviable dilemma. If she stays true to the original aim of the Aristotelian naturalistic project, and attempts to put forth an account of human flourishing that is explicable in terms of contemporary biology, she ends up with a moral theory that gives rise to implausible judgments about virtue and flourishing. If, on the other hand, she opts for an account that incorporates avowedly normative criteria, she would arguably end up with a *prima facie* more plausible moral theory; however, she would achieve this only at the cost of sacrificing a central aim of Aristotelian naturalism, that of basing an account of the virtues on a naturalistic foundation.

If my arguments in this dissertation are correct, such a dilemma would plague any attempt to advance an Aristotelian naturalistic account, and the road for the Aristotelian naturalist would be an uphill one indeed. Having delivered this prognosis, however, I think it is still possible to

end this dissertation on a somewhat more positive note. Rather than see the work of my dissertation as a report of the problems besieging Aristotelian naturalism, an enterprising reader could choose to use this work as a roadmap charting the obstacles and roadblocks that must be overcome by future builders of such Aristotelian accounts. In this way, perhaps, the end of this dissertation may yet herald, both temporally and intellectually, the beginning of another, more positive work in this area.

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BIOGRAPHICAL SKETCH

Ching-E Nobel Ang was born in Singapore in 1976. At the age of twelve, he started doing philosophy without quite realizing that was what he was doing. In his math classes, he questioned *why one ought to* use variables like x , y and z to solve math problems when natural numbers seem more... natural. It was around this time that he realized that there are many “why one ought to” questions about things around us that many people either do not or are not willing to think about. When he entered the National University of Singapore in 1997, he realized that there is an academic discipline (philosophy) devoted to pondering these “why one ought to” questions, and he lost no time in majoring in it. He has been a philosophy major ever since. After graduating with a B.A. from the National University of Singapore, he came to the University of Florida in August 2001, and obtained his M.A. in philosophy in 2004. He received his PhD in philosophy from the University of Florida in May 2009.