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Reconstructing a Hopeful Theology in the Context of Evolutionary Ethics

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INTRODUCTION

The purpose of this thesis is to articulate a theological metaethic which accepts the nature of ethics as understood under the rubric of evolutionary theory. It will be argued that such a theological metaethic can be interpreted as hopeful and optimistic given the apparent evolution of the moral from the amoral. The biologist Theodosius Dobzhansky suggested that “nothing in biology makes sense except in light of evolution.”¹ But how wide a net is cast with this remark? Biology is the science of *bios*, meaning ‘life’. Our social, psychological, religious, and moral experiences are unquestionably elements of our life; are they hence within the remit of biology? Of course human experience requires higher levels of study though sociology, psychology, etc., but that does not discount the potential insights biology may bring to our self-understanding. Evolutionary theory is not only an analysis of the differential selection of genes, recombinant DNA, mutations, adaptations, and so on, but also has legitimate anthropological import, which, as Joseph Ratzinger notes, challenges faith to “understand itself more profoundly and thus help man to understand himself....”²

The principles of evolutionary theory can be employed beyond the confines of biology to develop a *Weltanschauung* which carries significant weight for our understanding of ourselves, and pertinently, our moral imperatives. Evolutionary theory has shown that we are just one strand in a complex web of millions of other evolutionary lineages; as the philosopher Mary Midgley’s asserts in her oft-quoted remark, “We are not just rather like

¹ Theodosius Dobzhansky, ‘Nothing in Biology Makes Sense Except in Light of Evolution’, *American Biology Teacher*, 35.3 (1973) p. 125

² Joseph Ratzinger, quoted by Christoph Schonborn, *Creation and Evolution: A Conference with Pope Benedict XVI*, Stephan Otto Horn and Siegfried Wiedenhofer eds., trans. Michael J. Miller, (San Francisco: Ignatius Press, 2008) p. 16. Here I refer to ‘Joseph Ratzinger’ as this quotation was taken from a period before he became Pope Benedict XVI. I use his papal title when quoting his work subsequent to him becoming pope.

animals; we are animals.”³ If theology were to ignore these insights, it would be, as Benedict XVI suggests, “confined to a ghetto and thus lose its significance for the whole of reality and of human existence.”⁴ What is thus required from a theological perspective is perennial revision and hermeneutical appropriation of whatever is well-founded in other disciplines or contexts; a theology that can be characterised by the decree of the reformation *semper reformanda* (always to be reformed).⁵

The relationship between theology and evolutionary theory is presented here not as dichotomic but as dialectic – this is not to suggest that the two fields are mutually communicative, but rather that both can contribute to a cohesive, overarching worldview. In this respect, this thesis threads together the theological presupposition of a God of values with the naturalistic and material presuppositions of the modern scientific worldview (being cognizant of the fact that science may not necessarily be presented with these presuppositions). This dialectic occurs between two different but intertwined levels. One is the level of ethical systems; in this work, a particular understanding of Western Christian ethics. This level is framed by another, broader level of metaethics; in this thesis, an overarching understanding of the character of ethics will emerge from reflections on evolutionary theory and its naturalistic context. This will be a naturalistic view, though one which is understood to fit within a theological framework.

Amidst the abundance of literature on the interplay between theology and evolutionary theory, one encounters many issues such as theodicy, teleology, and our understanding of the significance of human life in light of our relationship with animals. Whilst aspects of these themes will require some attention, what is of specific interest within

³ Mary Midgley, *Beast and Man: The Roots of Human Nature*, (London: Routledge, 2002) p. xxvii [Originally published 1979]

⁴ Benedict XVI, in *Creation and Evolution: A Conference with Pope Benedict XVI*, p. 161

⁵ I have argued elsewhere that theology not only needs to dialogue with evolutionary science but more specifically, engage with representations of evolution that are presented as inherently inimical to theological worldviews, Gary Keogh, *Reading Richard Dawkins: A Theological Dialogue with New Atheism*, (Minneapolis: Fortress, 2014)

the broad context of ‘theology and evolution’ is a reshaping of theological metaethics which is fully appreciative of the insights made available through evolutionary ethics and the wider picture of science in general. This is not to interpret evolution theistically, nor to seek credence for theological propositions, but rather to take evolutionary ethics *in toto* and incorporate it into a worldview which will re-evaluate the viability of particular theological themes and reconstruct an overarching theological metaethic. It will be argued that this theological metaethic can scaffold a particular understanding of Christian ethics as an ethical system, providing a more holistic and enriched vision which ultimately illustrates, to use Charles Darwin’s phrase, the grandeur of this (evolutionary) view of life.⁶

In the task of reshaping a theological metaethic, it is important that the ‘conventional’ theological framework for understanding good and evil be acknowledged, as this work does not come *ex nihilo*. Indeed much of the history of at least Western Christian theology can be characterised by a predominant metaethical understanding which has an identifiable asymmetrical quality; a presupposed good and a conspicuous evil (in that evil demanded explanation in a world created good). This context will be the subject of Chapter One. The asymmetrical approach of a presupposed good and conspicuous evil is perhaps most evident in the Augustinian exegesis of Genesis which led to the influential doctrines of the fall and original sin; ideas which subsequently pervaded much of theology and philosophy. An expiatory (atoning) theodicy prevailed, where divinely instituted goodness was spoilt by human transgression, illustrating the corrupt nature of humanity (being mindful that interpretations on whether humanity is ‘corrupt’ have varied among Christian demoninations). In this view, evil existed as result of humanity’s sin; this will be understood as the ‘classical’ or ‘traditional’ theological metaethic. It will also be demonstrated in this chapter how the principles of evolutionary theory intersect with certain key features of this

⁶ Charles Darwin, *The Origin of Species*, (London: Wordsworth Classics, 1998) p. 369 [Originally published 1859]

influential metaethic challenging significantly its asymmetrical character and consequently, the whole framework for understanding good and evil. This intersection between evolutionary theory and the traditional theological vision of good and evil provides the conceptual landscape within which this thesis rests; it highlights the need for a revised metaethic in light of evolutionary theory.

The second chapter will then turn to how the nature of ethics is envisaged from the perspective of evolutionary theory; how the principles of competition and struggle in natural selection can be reconciled with the apparent altruism and morality existent in humans and other species. It will also be considered how this understanding of ethics can be compatible with a particular understanding of Christian ethics. In this chapter, what is understood by ‘Christian ethics’ will be explicated; Christian ethics in this context is characterised by three key features; moral freedom, *agape* and neighbourly love, and natural law. Potential conflicts between Christian ethics and evolutionary ethics will then be addressed apropos these three themes. Although the classical expiatory framework for understanding good and evil will be shown to be inconsistent with evolutionary theory in Chapter One, it will be argued in Chapter two that perceived conflicts between Christian ethics and evolutionary ethics can be overcome upon a deeper analysis of evolutionary ethics. Consequently, this chapter will assert that Christian ethics is compatible with evolutionary ethics, and therefore, the task set in this thesis – to construct a theological/evolutionary metaethic which frames a Christian view of ethics – is possible.

In Chapter Three the task of redrafting a theological appreciation of good and evil will be attended to. After establishing that the traditional theological framework of a primordial good and conspicuous evil fails in light of evolutionary theory in Chapter One, and having further acknowledged evolutionary explanations of ethics in Chapter Two, this chapter will discuss a renewed approach with respect to a theological metaethic; a

paradisiacal past marred by human transgression is no longer tenable. Although such a renewed approach is evident within certain branches of theology, particular issues will be identified which require further reflection and refinement. Consequently, building upon and adding to others' work, a theological worldview will be proposed in this chapter which is appreciative of evolutionary ethics.

In outlining a shift in worldview, from the expiatory theodicy of Augustine to a more dynamic approach in line with evolutionary theory, the question of theodicy needs to be addressed; it was in a sense, the asymmetrical need to account for evil which framed the Augustinian explication of the fall. In moving away from the Augustinian framework, the question of evil is left unresolved. In Chapter Three, aspects of a response to the problem of evil will be suggested with respect to moral evil. Chapter Four will then give attention to the question of natural evil. In addition, given that evolutionary ethics, and the wider picture of modern science in general offers a seemingly self-sufficient, naturalistic ontological picture of the world, this naturalistic context must be considered. Chapter Four will thus argue that the world can be understood from the perspective of a naturalistic/material ontology. It will be outlined how a naturalistic ontology is consistent both with advances in modern science and theological considerations, significantly, the problem of natural evil. Furthermore, it will be explained how theological presuppositions can be consistent with a naturalistic ontology. Notwithstanding the weight attributed to a naturalistic ontology and its coherence with a theological view, it is acknowledged that a distinct caveat emerges when naturalism is interpreted theologically; namely, the connotations of inevitability which may be interpreted as nihilistic.

The fifth and final chapter of this thesis seeks to circumvent this caveat by illustrating how a naturalistic theological metaethic can provide a hopeful outlook. In order to do so, the issue of free will must be addressed; it will be argued throughout this thesis that

free will is a prerequisite of moral decisions, and thus without some form of free will morality becomes vacuous. Yet if mental events are material, as in the perspective of a naturalistic/material ontology, then the mental realm is governed by the same physical laws that govern the rest of non-conscious matter. In order to reconcile the concept of free will with a naturalistic/material ontology, this chapter will turn to a compatibilist conception of free will which recognises the reality of freedom but also the deterministic character of physicalism. It will then be proposed that the fact ethics evolved from what can be understood as a non-teleological, evitable and material world offers a glimmer of hope; the world need not be viewed nihilistically as meaningless collocations of atoms. The existence of goodness is seen here as indicative of profundity; a profundity interpreted theologically to be reflective of divine values. Moreover, it will be argued in this chapter that human morality is in a process of progression which can be understood from a Christian perspective as a progression towards an immanent *telos*; the concept of *agape*. This moral progression is considered as a further development in the natural evolution of altruistic behaviour as understood within the framework of evolutionary ethics. Consequently, a hopeful theological metaethic or axiology can be reconstructed to embrace the invaluable insights into the nature of morality which emerge from evolutionary ethics.

CHAPTER ONE

THE CONTEXT OF THEOLOGICAL METAETHICS:

A PRESUPPOSED GOOD AND A CONSPICIOUS EVIL

1.0 Introduction

The question of how accommodative Christian theology can be of modern science is one which has spawned many responses, extensively diverse and wide-ranging. What will be dealt with here is a specific reading of a specific element of this much broader dialectic, namely, how a particular reading of evolutionary ethics can contribute to a theological understanding of ethics. Whilst these two disciplines may not wholly and transparently align, evolutionary ethics can have a dynamic impact on Christian theological ethics. This is not necessarily a thesis about particular ethical challenges which evolutionary theory begets, though these are important and fascinating issues and will play a supporting if peripheral role. What is of more immediate concern is a schema for understanding good and evil, one which is appreciative of our current scientific understandings of the world though developed through theological and philosophical thought. In conjunction with the theories and doctrines of modern science, it will be shown how evolutionary ethics can offer a glimmer of hope in what may be interpreted as a nihilistic world.

In order for us to make visible what lies ahead, both in this text and in general, we must recall what has gone on before. This chapter will thus engage with the context out of which the core statements of the thesis will emerge. It will explore the rich traditions of theology and its understanding of good and evil, which has traditionally (though not universally) been presented under the umbrella themes of original sin and the fall. Distinct aspects of this understanding will be highlighted which evolutionary ethics can have

implications for. This will allow situating evolutionary ethics within the broader scheme of theological appreciations of good and evil. Specific, identifiable, and recurrent themes within theological frameworks for understanding ethics will provide focus in this chapter. The predominant theme that will be identified throughout this discussion will be the asymmetry in theological and philosophical frameworks for understanding good and evil; there was a discernible preoccupation with the question of evil, whereas goodness was always presumed. It will be argued that this asymmetrical presupposition is something that is in particular need of revision in light of evolutionary theory.

Preparatory to engaging with the subject matter, some brief notes clarifying semantics will be provided to assert what is meant when various terms are used; good, hope, sin, evil, etc. This will help to avoid grammatical confusion over the use of related terms. Section 1.2 will demonstrate how the questions of the origins of kindness did not feature in theological or philosophical discourse because theology had generally provided a satisfying answer; goodness has its origins in God. Therefore, it can be asserted that historical understandings of ethics are marked by a theo-centric character. Section 1.3 will then explore the preoccupation with the origins of evil that pervades theological discourse and represents one of the most debated issues in intellectual history. The theo-centric character of 'traditional' frameworks for understanding good and evil, and the debate on the origins of evil exemplify the asymmetrical understanding of a primordial goodness followed by sin/evil which begs explanation. The cyclical concepts of crime and punishment will be the focus of section 1.4 in relation to the prevalent expiatory understandings of sin, human nature and suffering. This will show how the notions of original sin and the fall became a predominant framework for what will be taken as the 'traditional Western Christian' framework for understanding good and evil. This framework stems largely from Augustine,

and thus may also be referred to as ‘Augustinian’ – though being mindful that as we shall see, Augustine was not its sole protagonist.

Section 1.5 will discuss the major influence these conceptions of good and evil have had in theology and philosophy. It will pinpoint where original sin has gained a marked foothold in philosophical thinking. The somewhat pessimistic vision of humanity as inclined towards evil can also be held to contrast with a more optimistic and hopeful reading of evolutionary ethics to be presented in later chapters. Similarly, the reigning imprint of the theme of punishment will be shown, but also critiqued in a somewhat Kantian manner, questioning whether the fear of punishment acts as a motive and thus negates the goodness of good actions. In preparation for a turn toward evolutionary theory then, section 1.6 will indicate where evolution presents problems for the more traditional understandings of good and evil.

1.1 Preliminary Semantic Clarifications

Although technically and grammatically different, certain terms will be used somewhat interchangeably throughout this dissertation. One cardinal assumption of this thesis is that the meaning of ‘hope’ is closely related to particular terms which are in turn close synonyms of each other; good, altruistic, ethical, moral, and neighbourly love, for example. Whilst these terms are not interchangeable in every grammatical context, they will be understood here as related. Neighbourly love for instance, is a state, whilst ‘good’ is an adjective which may be employed to describe actions consistent with neighbourly love. Hope is usually an expectant term; one can be hopeful about the consequences of their actions, in contrast to acting out of neighbourly love, which need not be as concerned with any particular outcome. However, in the context of the present study, hope is predominantly presented as a view in

opposition to nihilism. These terms (hope, good, moral, etc.) are neither inherently separate nor inherently synonymous, but understood as closely related in this context.

A central assumption of this dissertation is that ethics or goodness provides hope. Hope is related to these other terms in this way. Hope can be understood here, as an ephemeral philosophical subject that stands firmly in opposition to nihilism or futility. This will become more apparent as we progress. Conversely, antonymous terms are also considered to be related; nihilism, sin, selfishness, evil, immorality, and unethical, for example. These terms are again, not inherently interchangeable in every grammatical context. Sin usually pertains to actions, whilst immoral is a descriptive term (though original sin, as we will see, also pertains to a description of the human condition). Yet, for present purposes, these terms can be understood as related. Similarly, evil, pain, and suffering are somewhat interchangeable terms with the potential to lead to hopelessness or nihilism (though this could be disputed with reference to the resilience of humanity portrayed eloquently in the book of Job, or in other ways). Understanding the terminology in this manner will aid the forthcoming project by avoiding confusion in this regard.

1.2 Theo-centric Context of Ethics

The primary goal of evolutionary ethics is to provide a framework in which the existant degree of altruism, goodness, ethics, etc. can be understood as consistent with the principles of natural selection. In other words, it seeks to explain how goodness came to be. Despite the profoundness of this question, it is relatively recent in philosophical and moral discourse. This is because traditionally, an answer was already assumed; goodness came from God. The Australian philosopher Peter Singer explains this point, “For centuries, religion provided a way out of this difficulty. It is natural for those who believe in God to look to his

wishes or commands for the origin of morality.”⁷ God created the world and it was good (Gen. 1:10). This theme runs throughout the history of philosophy and ethics even beyond Judeo-Christian civilisations. Plato’s *Demiurge* is a prominent example; although Platonism was indeed appropriated by Christian thinkers, for example Augustine⁸, Plato’s supposition of a good God was explicated in a culture that in his own time was quite distinct from early Judeo-Christian civilisations, “Let us therefore state the reason why the framer of this universe of change framed it at all. He was good... God therefore, wishing that all things should be good and so far as possible nothing be imperfect....”⁹ Given its divine origin, goodness was expected and assumed. It was not a feature of the world that demanded explanation; the explanation was already supposed.

Correspondingly, the rules and laws which determine whether certain actions are classified as moral or immoral were also traditionally associated with a divine will, as philosopher Alasdair MacIntyre illustrates, “God is our father. God commands us to obey him. We ought to obey God because he knows what is best for us.”¹⁰ God established a divine mandate, a code for how we ought to live, rules we must abide by. MacIntyre goes on, however, to suggest that this vision of God-as-lawgiver immediately raises the question of why should we be obedient? He provides an answer which relates to the first point made in this section; that God is assumed good (and holy and powerful) and God’s laws reflect this.¹¹ The concept of a pre-existing normative, divine, natural or ecclesiastical set of laws permeated moral discourse for centuries, and has been defined as ‘classicism’ by theologian Richard McBrien in his work *Catholicism*.¹² The classicist view of ethics, which is arguably still prevalent, can be evidenced throughout history from the ten commandments of the

⁷ Peter Singer, *The Expanding Circle: Ethics, Evolution and Moral Progress*, (New Jersey: Princeton University Press, 1981) p. xv

⁸ Scott MacDonald, ‘The Divine Nature’, Eleonore Stump and Norman Kretzmann eds., *The Cambridge Companion to Augustine*, (Cambridge: Cambridge University Press, 2001) p. 72

⁹ Plato, *Timaeus and Critias*, trans. Denis Lee, (Middlesex: Penguin Books, 1979) p. 42

¹⁰ Alasdair MacIntyre, *A Short History of Ethics*, (London: Routledge, 2002) p. 107 [Originally published, 1967]

¹¹ *Ibid.*, p. 108

¹² Richard McBrien, *Catholicism: II*, (Minneapolis: Winston Press, 1980) p. 941

Decalogue through to the deontological categorical imperative of Immanuel Kant, characterised by the idea of universal laws; “I am never to act otherwise than so that I could also will that my maxim should become a universal law.”¹³

This classicist vision of ethics remained dominant throughout the centuries – though the rigidity or legalism varied among scholars. The ethical vision of Aquinas, for instance, was more amenable, appreciative not only of scriptural decrees but also of the powers of human reason, evident in his strong admiration of Aristotle.¹⁴ Aquinas also understood the variance in human nature with regard to moral beliefs; “... these moral institutions are various for various people.”¹⁵ Religious thinking dominated the ethical and intellectual landscape until the Enlightenment when many felt that faith was beginning its demise; Matthew Arnold wrote in ‘Dover Beach’ [1867] how he heard the sea of faith’s “long withdrawing roar”.

Secular ethics and even atheism are arguably evident even amongst the pre-Socratics. Nevertheless, it was not really until the Enlightenment that such ideals became more prominent, though perhaps still peripheral. Oxford theologian Alister McGrath, for example, pinpoints the French Revolution in 1789 as the “dawn of the golden age of atheism in the West.”¹⁶ Secular ethical systems emerged from this tumultuous period, manifest for example, in the influential utilitarian philosophies of Jeremy Bentham and John Stuart Mill. Rather than obedience to divine law, Bentham and Mill sought to base morality and law on

¹³ Immanuel Kant, *Groundwork for the Metaphysics of Morals*, trans. Mary Gregor (Cambridge: Cambridge University Press, 1999) p. 15 [Originally published 1785]

¹⁴ Bertrand Russell, *History of Western Philosophy*, (London: Routledge, 2010) pp. 418-424 [Originally published, 1946]

¹⁵ Thomas Aquinas, *Summa Theologica: I-II*, trans. Fathers of the English Dominican Province, 2nd and rev. ed., (London: Burns Oates and Washbourne, 1920) 100.1

¹⁶ Alister McGrath, *The Twilight of Atheism: The Rise and Fall of Disbelief in the Modern World*, (London: Random House, 2004) p. 21

the principle of whether certain actions “augment or diminish the happiness of the party whose interest is in question.”¹⁷

Amongst the secular ethicists, the question of the origins of goodness was still hardly asked – and those that did probe this question, such as Jean-Jacques Rousseau, still proposed that a set of laws were devised by archaic societies.¹⁸ Friedrich Nietzsche recognised this in 1886 as he wrote, “As strange as it may sound, the problem of morality itself has been *missing* from every ‘science of morals’ so far: there was no suspicion that anything was really a problem.”¹⁹ The classicist framework for ethics, thus, maintained its influence. In religious systems particularly, the concept of divine laws was paramount. What can be discerned, therefore, is the theo-centric character of the history of ethical philosophy. Intuition and theology usually provided an answer to the origins of good; goodness came from God. This is a foundational premise which framed philosophical and theological understandings of good and evil; ethics is contextualised by a good God, and a good creation. This is a marked characteristic of the traditional understanding of good and evil. The primary question of evolutionary ethics, therefore, did not exist in public consciousness in any meaningful way until relatively recently. The assumption of the innate goodness of God and creation led to the reverse question gaining a far more pronounced role in philosophy and theology; the question was, as articulated by David Hume, “Whence then is evil?”²⁰

¹⁷ Jeremy Bentham, *The Principles of Morals and Legislation*, (New York: Prometheus Books, 1988) p. 2 [Originally published 1780]; also, John Stuart Mill, *Utilitarianism*, (London: Dover, 2007) [Originally published 1861]. There are, however, subtle differences between Bentham and Mill. For example, Mill distinguishes between higher and lower forms of happiness. For discussion, see Harvard political philosopher, Michael J. Sandel, *Justice: What’s the Right Thing to Do?*, (London: Penguin, 2009) p. 52

¹⁸ Jean-Jacques Rousseau, *The Social Contract*, trans. H.J. Tozer, (Hertfordshire: Wordsworth Editions, 1998) p. 15 [Originally published 1762]

¹⁹ Friedrich Nietzsche, *Beyond Good and Evil*, trans. Judith Norman, (Cambridge: Cambridge University Press, 2002) p. 76 [Originally published 1886]

²⁰ David Hume, *Dialogues and Natural History of Religion*, (Oxford: Oxford University Press, 1998) p. 100 [Originally published 1779]

1.3 The Theodicy Question

Hume, of course, was not the first to address the infamous ‘problem of evil’ which stems logically from postulating a good, omniscient and omnipotent creator whilst also acknowledging the degree of suffering existent in the world. The ancient Greeks, such as Chrysippus and Epicurus grappled with the issue centuries before Christ. Circa the second century A.D., Sextus Empiricus, classified as a Greek sceptic, elucidated the problem as follows:

Those who affirm positively that God exists cannot avoid falling into an impiety. For if they say that God controls everything, they make Him the author of evil things; if on the other hand, they say that He controls some things only, or that He controls nothing, they are compelled to make God either grudging or impotent, and to do that is quite obviously an impiety.²¹

This paradox has been perennially recycled and used to underpin attempts at logically challenging the existence of God. The influential Swiss theologian Hans Küng identifies the problem of evil as “the rock of atheism” and suggests that it has scarcely changed since the ancient Greeks.²² It continued to provide ammunition against theism for twentieth century atheist philosophers such as Bertrand Russell²³ and J.L. Mackie²⁴, and perhaps in part led Nietzsche to contemptuously discard the whole idea of Christianity as farcical.²⁵ It is a theme which also perennially appears throughout literary history. The literary critic Terry Eagleton analyses the manifestations of problem of evil in literature from Milton’s *Paradise Lost* to William Golding’s *Lord of the Flies*.²⁶

Gottfried Leibniz, who coined the term ‘theodicy’, meaning a theological explanation for evil, sought along with others to resolve the problem rationally. Leibniz’s

²¹ Bertrand Russell, *History of Western Philosophy*, p. 229

²² Hans Küng, *On Being a Christian*, (Glasgow: William Collins Sons, 1978) p. 429

²³ Bertrand Russell, *Why I’m Not a Christian*, (London: Routledge, 1957) p. 20

²⁴ J.L. Mackie, *The Miracle of Theism: Arguments for and Against the Existence of God*, (Oxford: Oxford University Press, 1982) p. 4

²⁵ Friedrich Nietzsche, *Beyond Good and Evil*, p. 56

²⁶ Terry Eagleton, *On Evil*, (New Haven: Yale University Press, 2010)

answer to the problem was the concept that this is ‘the best of all possible worlds’, “Now as there is an infinity of possible universes in the Ideas of God, but one of them can exist, there must be a sufficient reason for the choice of God which determines him to select one rather than another. And this reason is to be found... in the degree of perfection....”²⁷ Contrary to Leibniz’s reasoned approach, Kant felt that the theodicy question can only be tackled in the context of faith and by “taking notice of the impotence of our reason.”²⁸ Voltaire re-articulated the problem in his ‘Poem on the Lisbon Disaster’ [1755] and in his work *Candide*,²⁹ whilst others such as Hegel attempted to justify God in light of the problem.³⁰ A more contemporary approach is that of philosopher Alvin Plantinga who sought to outline how beliefs about God can be reconciled with suffering; evil can exist in a world created by a good God. At the risk of oversimplifying, he suggests that moral evil is the result of human persons’ free actions, whilst natural evil is the result of the free actions of nonhuman persons, e.g. Satan (moral evil and natural evil will be further discussed in Chapters Three and Four respectively).³¹ Plantinga thus, is not so much offering a justification of evil in light of God’s goodness, but rather demonstrating the logical coherence of God’s goodness in a world where suffering exists. Pertinent in the context of this thesis, the problem of evil also perplexed Charles Darwin, as he wrote in a letter to the American botanist Asa Gray in 1860:

I cannot see, as plainly as others do, and as I should wish to do, evidence of design and beneficence on all sides of us. There seems to me too much misery in the world. I cannot persuade myself that a beneficent and omnipotent God

²⁷ Gottfried Leibniz, *Discourse on Metaphysics, Correspondence with Arnauld, and Monadology*, trans. George Montgomery, (Chicago: Open Court, 1908) pp. 262-263 [*Monadology* originally published 1714]

²⁸ Immanuel Kant, ‘On the Miscarriage of all Philosophical Trials in Theodicy’, *Religion and Rational Theology*, trans. and ed. Allen W. Wood and George Di Giovanni, (Cambridge: Cambridge University Press, 2001) p. 34 [Originally published 1791]

²⁹ Voltaire, *Candide: And Other Stories*, trans. Roger Pearson, (Oxford: Oxford University Press, 2006) [Originally published 1759] pp. 52-54

³⁰ See G.W.F. Hegel, *The Philosophy of History*, trans. J. Sibree, (Ontario: Batoche, 2001) p. 29 [Originally published 1837]

³¹ Alvin Plantinga, *God, Freedom and Evil*, (London: George Allen and Unwin, 1974) pp. 30-59

would have designedly created the *Ichneumonidae* with the express intention of their feeding within the living bodies of caterpillars, or that a cat should play with mice.³²

When considering the problem of evil, an immediate caveat surfaces; the innate subjectivity in our classifying certain events/subjects as ‘evil’. Is it not a remarkable illustration of human hubris that we have taken it upon ourselves to classify what is and what is not evil? This was the objection put forth by Spinoza; notions such as disgust, repugnance, rottenness, ugliness, delight, etc., are only considered as such when certain events affect human senses.³³ Whether or not something, an event or entity, is classified as ‘evil’ depends solely on its relation to the human mind. The theologian John Hick, in his work *Evil and the God of Love*, illustrates the point, “... in terms of the usefulness of things to ourselves, there lies a deeply rooted delusion of the human mind that everything in nature obeys a purpose and works towards some end.”³⁴ It can be argued that ‘good’ and ‘bad’ are not *a priori* concepts; they are not Platonic ideas but merely human inventions. As such, even the positing of the problem of evil may be misguided.

This objection to the theodicy question can be substantiated by referral to MacIntyre and the idea of ‘functional concepts’. MacIntyre enters this discussion by questioning the relationship between the ‘is’ and the ‘ought’. Taking his cue from the philosopher Arthur Prior [1914-1969], MacIntyre explains how an ‘is’ can determine an ‘ought’, “From the premise ‘He is a sea-captain’, the conclusion may be validly inferred that ‘He ought to do whatever a sea-captain ought to do’.”³⁵ The validity of a statement attributing ‘goodness’ to a subject can only be ascertained if that subject has been given what MacIntyre calls a ‘functional concept’. A watch can be validly described as a good

³² Charles Darwin, *The Life and Letters of Charles Darwin: II*, Francis Darwin ed., (Cambridge: Cambridge University Press, 2009) p. 12 [Originally published 1887]

³³ Spinoza, *Ethics*, trans. G.H.R. Parkinson, (London: J.M. Dent and Sons, 1989) p. 37 [Originally published 1677]

³⁴ John Hick, *Evil and the God of Love*, rev. ed., (San Francisco: Harper Row, 1977) p. 19 [Originally published 1966]

³⁵ Alasdair MacIntyre, *After Virtue: A Study in Moral Theory*, (London: Duckworth, 1981) p. 57

watch if the watch is defined in terms of a purpose or function. A watch may be a good watch because it tells the time accurately; but it cannot be considered good independent of the function we have attributed to it. One could equally say, if they sought to use the watch as a paperweight for instance, that it was a good watch because it performs that function well, irrespective of whether it tells time accurately. Ostensibly, the notion of ‘good’ only exists insofar as we define what good is. Similarly, if we take the idea of a super-virus that has the potential to eradicate human civilisation, we would generally consider that to be an example of evil in the world. However, it is only evil because we attribute evil to it. The virus may be exceptionally good in terms of its functionality; it replicates and infects host bodies efficiently and has developed immunity to antibiotics. Consequently, we are left with the perplexity of whether good even exists abstractly or is wholly and intrinsically bound up in our own definitions and prescribed functions. This perplexity was also attended to by Aristotle in his *Nicomachean Ethics*, and provides a significant obstacle to even posing the problem of evil.³⁶

Just as questions can be raised over the existence of an objective good, so too questions can be raised over the existence of an objective evil. Augustine for example, discussed evil as an absence of good; a ‘privation of good’ or *privatio boni*. Augustine “breathed in” and adapted Plotinus’ notion that evil is not a positive force, but the “going wrong of God’s creation” which is fundamentally good.³⁷ Augustine makes a metaphysical claim that evil is “accurately describable as a loss or lack of goodness” rather than something primary; evil has not been created by God.³⁸ Viewing evil as an absence of goodness further exemplifies the asymmetrical characteristic of the ‘traditional’ theological framework for good and evil; goodness here is again, presupposed. What is required is an

³⁶ Aristotle, *Nicomachean Ethics*, Richard McKeon ed., *The Basic Works of Aristotle*, (New York: Random House, 2001) p. 940

³⁷ John Hick, *Evil and the God of Love*, pp. 46-49

³⁸ *Ibid.*, p. 55

understanding or explanation of evil – in this case, evil is not understood to have substance itself but is only a manifestation of the absence of something else – good.

Notwithstanding this caveat, it is still possible to contend that evil exists in the world, and therefore, still demands explanation in itself. Hick presents an argument along these lines in his shift away from Augustine and the neo-Platonist conception of evil as *privatio boni*. Hick believes that evil is a positive force; ‘positive’ meaning in this context, being a substantive ‘something in itself’ and not merely consequential. He asserts, “As an element in human experience, evil is positive and powerful. Empirically, it is not merely the absence of something else but a reality with its own distinctive and terrifying quality and power.”³⁹ For Hick, the quality of natural evil (earthquakes, volcanic eruptions, etc.) can be attributed when it “impinges deleteriously upon the realm of the personal, or at least upon the sphere of animal life.”⁴⁰ The degree of suffering and pain caused by natural evils cannot be understated and dismissed merely as a lack of good, even if the causes were not evil in any *a priori* way; an earthquake or volcanic eruption are not evil things themselves. To discount the suffering and pain caused by these events would be deeply fallacious.

With regard to moral or intentional evil, the inadequacies of *privatio boni* become even more prevalent. When we consider the malevolence and intentional evil which is prevalent in human history and even today, it becomes extraordinarily difficult to attribute this evil to merely a lack of goodness. Taking the holocaust as the archetypal example, Hick states, “The evil will as an experienced and experiencing reality is not negative. It can be a terrifyingly positive force in the world. Cruelty is not merely an extreme absence of

³⁹ Ibid., p. 55

⁴⁰ Ibid., p. 56. It is interesting that Hick uses the term ‘animal life’ as opposed to just human life. This is a relevant distinction in the context of evolutionary ethics, given that one of the principle implications of evolution for theology has been the empirical understanding of *homo sapiens* as another animal. This realisation could be interpreted to be in stark contrast to Augustine’s explicit distinction between humanity and other animals by virtue of our intellect. Augustine, *On Genesis: A Refutation of the Manichees*, trans. Edmund Hill, John E. Rotelle ed., *On Genesis*, (New York: New City Press, 2002) p. 57

kindness, but is something with a demonic power of its own.”⁴¹ In experiential terms (as opposed to metaphysical) the intentional actions of individuals which cause incomprehensible suffering can hardly be understood as a lack of good virtues. Nevertheless, we should be mindful here that it may not be an ‘either/or’ situation, the *privatio boni* reading on one hand and Hick’s acceptance of evil as a positive force on the other. We should, along with the theologian David Tracy, have an awareness of the necessity of “responsible pluralism”; there is a plurality in texts which demands hermeneutical interpretation.⁴² The debate on evil is a case in point, evident in the writing of psychologist Carl Jung. Hick cites Jung as a critic of the *privatio boni* conception of evil.⁴³ Yet Jung also discusses evil or sin as a result of failing to achieve our ambitious moral expectations.⁴⁴ This aspect of Jung could be interpreted as consistent with the *privatio boni* approach, contrary to Hick’s claim. Therefore, it can be asserted that in exploring this debate on evil, we may not arrive at a firm destination; we may need to leave this question open.

Although the nature of evil may not be clearly defined, the point remains that there is clear evidence of an asymmetrical preoccupation with explanations for evil throughout philosophical and theological history. Certainly before Darwin, and indeed afterward, goodness was assumed and ethicists largely concerned themselves with the so called problem of evil. As Nietzsche states, “Morality itself... was thought to be a ‘given’.”⁴⁵ In contributing to the aims of this chapter, then, we can affirm that the context of theological understandings of good and evil are characterised in a significant way by the prevalence of the theodicy question throughout intellectual history, from the ancient Greeks to contemporary philosophers. Highlighting this point will help contextualise evolutionary

⁴¹ John Hick, *Evil and the God of Love*, p. 57

⁴² David Tracy, *The Analogical Imagination: Christian Theology and the Culture of Pluralism*, (London: SCM, 1981) p. 124

⁴³ John Hick, *Evil and the God of Love*, p. 57n

⁴⁴ Carl Jung, from *Psychology of Religion*, Anthony Storr ed., *Selected Writings*, (London: Fontana, 1983) p. 88 [Originally published 1938]

⁴⁵ Friedrich Nietzsche, *Beyond Good and Evil*, p. 75

ethics by demonstrating the contrast between traditional ethics and evolutionary ethics. The traditional framework for understanding good and evil will now be further explored, placing emphasis on the dominant themes of sin and punishment in the history of Western thought.

1.4 Original Sin: Evil as Sin and Punishment

The influential concepts of sin and punishment are also intrinsic to the traditional theological metaethic. The theology of sin and punishment provides an understanding of our vision of humanity and its relationship with evil. The predominant framework for understanding these issues has a scriptural source in Genesis, but is more specifically, derived from the Augustinian exegesis of Genesis. Any one model for understanding, as philosophers such as Paul Ricoeur would constantly remind us, is indeed just that; one model among others with multiple interpretations.⁴⁶ However, the influence of Augustine's framework for understanding sin and punishment should not be underestimated. It was already stated in section 1.2 that a cardinal premise which pervades ethical thought is that creation was made 'good'. Another dominant theme which contextualises theological ethics is that this paradisiacal creation was spoiled by what palaeontologist and philosopher Pierre Teilhard de Chardin calls an "initial transgression" or primordial sin; humanity turned away from God at some ancient point thus introducing sin into the world – the fall.⁴⁷ This idea of an original sin, dramatised through the Adamic myth, has become deeply entrenched in Western Christian thinking and foregrounds the dominant model for understanding good and evil.

Interestingly, however, the Adamic narrative does hold not much significance throughout either of the testaments. Adam is referred to throughout the Old Testament as a somewhat peripheral or incidental character, and the actual story of the fall holds little significance. Ricoeur makes this point by suggesting that the story of Adam should not be

⁴⁶ Dan R. Stiver, *Theology After Ricoeur: New Directions in Hermeneutical Theology*, (Kentucky: Westminster John Knox, 2001) p. 14

⁴⁷ Pierre Teilhard de Chardin, *Christianity and Evolution*, trans. René Hague, (London: Collins, 1971) p. 81

isolated from the other stories in Genesis; Cain and Abel, the tower of Babel, Noah and the Great flood, etc.⁴⁸ Similarly, according to the Gospels, Jesus never explicitly refers to Adam.⁴⁹ Moreover, the doctrine of original sin is not evident in the writings of the Greek Church Fathers. Although Tertullian, Origen, Athanasius, Chrysostom, Cyril of Jerusalem, Gregory of Nazianzus and Gregory of Nyssa all wrote about the fall, they did not do so in such terms as an original sin or guilt which is inherited by humanity.⁵⁰ Paul did, however, as Ricoeur states, raise the Adamic theme from its lethargy.⁵¹ Even so, Paul only used Adam as a figure with which to contrast Christ, “For as all die in Adam, so all will be made alive in Christ” (I Cor. 15:22). Therefore, it is only retroactively through Christ that Adam gained individuality in the scripture; it was retroactively then, that Adam became demythologised and understood as the person from which humanity descended physically.⁵² Ricoeur thus challenges the view that the story of Adam is a cornerstone of the Judeo-Christian tradition, “... it is only a flying buttress, articulated upon the ogival crossing of the Jewish penitential spirit.”⁵³

For Ricoeur, the story of Adam has the “greatness of myth”, indicating that it has a more multifaceted and richer meaning than a purely historical account of an event.⁵⁴ Indeed, Augustine himself recognised this and was perturbed by the possibility of Genesis being interpreted and promulgated literally, “Now it is quite disgraceful and disastrous... that they should ever hear Christians spouting... and talking such nonsense that they can scarcely contain their laughter....”⁵⁵ Ricoeur shares Augustine’s angst, though has the benefit of being able to actually look at how the Adamic myth was interpreted from the time of Augustine until relatively recently, “It will never be said enough just what evil has been done to

⁴⁸ Paul Ricoeur, *The Symbolism of Evil*, trans. Emerson Buchanan, (Boston: Beacon Press, 1969) pp. 237-238

⁴⁹ *Ibid.*, p. 238

⁵⁰ Alister McGrath, *Christian Theology: An Introduction*, 3rd ed., (Oxford: Blackwell, 2003) p. 442

⁵¹ Paul Ricoeur, *The Symbolism of Evil*, p. 238

⁵² *Ibid.*, pp. 238-239

⁵³ *Ibid.*, p. 239

⁵⁴ *Ibid.*, p. 239

⁵⁵ Augustine, *On The Literal Meaning of Genesis*, John E. Rotelle ed., *On Genesis*, p. 186

Christianity by the literal interpretation, the “historicist” interpretation, of the Adamic myth. This interpretation has plunged Christianity into the profession of an absurd history....”⁵⁶ Ricoeur opts for a hermeneutical vision which lies between the “naive historicism of fundamentalism and the bloodless moralism of rationalism....”⁵⁷

The prevailing understanding of good and evil manifest in Augustine’s reading of Genesis and his doctrine of original sin, is essentially a response to the conundrum of the problem of evil. Hick suggests that the concept of the fall is scaffolded by two pillars; one maintains the goodness of God and creation (as discussed in section 1.2) and one the guilty nature of creatures:

The theodicy that follows from belief in the fall of angels, and its repetition on mankind, is built upon two central pillars of doctrine: first, that God created all things good; and second, that free creatures, by an inexplicably perverse misuse of their God-given freedom, fell from grace, and that from this fall have proceeded all other evils that we know.⁵⁸

The belief in a fall provides a solution to the question of evil’s origin; it comes as a result of an intentional turning away from God’s goodness. In answering the Gnostics’ articulation of the question ‘Whence comes evil?’, Augustine developed the apologetic concept that humanity’s moral negligence was responsible; evil or suffering came as a result of our sin.⁵⁹

The Adamic myth provides an explicit demarcation between the origin of evil, and the origin of creation itself. It thus provides a stark contrast between the inherent goodness of God’s creation and the existence of evil. In the words of Ricoeur, it distinguishes between the ‘radical’ origins of evil, and ‘primordial’ origins of good.⁶⁰ This understanding of creation can be sharply distinguished from the writings of the Gnostics, such as Theophilus

⁵⁶ Paul Ricoeur, “‘Original Sin’: A Study in Meaning”, Don Ihde ed., *The Conflict of Interpretations: Essays in Hermeneutics*, (London: Athlone, 2000) p. 285

⁵⁷ Ibid., p. 285

⁵⁸ John Hick, *Evil and the God of Love*, p. 62

⁵⁹ Paul Ricoeur, “‘Original Sin’: A Study in Meaning”, p. 271

⁶⁰ Paul Ricoeur, *The Symbolism of Evil*, p. 233

of Antioch, who drew upon the Platonic idea that the universe was made out of pre-existing matter – matter which in their view was deficient, thus accounting for evil in the world.⁶¹ They emphasise the distinction between creator and created, and therein lies the difference between good (God) and evil (matter). In the Gnostic tradition, writers such as Origen therefore, view creation and the fall as almost synonymous.⁶²

In contrast, the theologian John Macquarrie in his work, *Principles of Christian Theology*, considers the Gnostic view inadequate; the fact that creation itself is not God “does not seem in itself to constitute sinfulness.”⁶³ The Gnostics’ stress on the otherness of God does not seem sufficient to account for the existence of evil. Moreover, the Gnostic vision of a deficient creation may well mitigate the goodness of God’s creation. It is for this reason that it is ultimately rejected by Augustine, as Hick explains:

Here, then, is a central theme of Augustine’s thought; the whole creation is good; the sun, moon, stars are good... all are good expressing as they do the creative fecundity of perfect goodness and beauty. So Augustine rejects the ancient Platonic, Neo-Platonic, Gnostic, and Manichaean prejudice against matter....⁶⁴

The interpretation of the Adamic myth offered by Ricoeur, then, is far closer to the more conventional Augustinian understanding (and is arguably, more coherent); the universe was created good, and evil arrived later, as a result of a radical human offence; an original sin. This is another cardinal feature of a traditional conception of good and evil; there is a chronological and conceptual separation between a good creation and the origin of evil. This is again illustrative of the asymmetry in the traditional conceptual framework for understanding good and evil.

⁶¹ Alister McGrath, *Christian Theology*, p. 297

⁶² John Macquarrie, *Principles of Christian Theology*, rev. ed., (London: SCM, 1977) p. 264. Note that here I follow Macquarrie’s classification of Origen as Gnostic, though this classification may be challenged.

⁶³ *Ibid.*, p. 264

⁶⁴ John Hick, *Evil and the God of Love*, p. 45

Ultimately, the traditional reading of good and evil stemming largely from Augustine interprets the biblical narrative as a literary comedy as opposed to a tragedy. It has a positive beginning and end, with a negative middle. The literary critic Northrop Frye describes the standard structure of a comedy as approximately U-shaped, “where a series of misfortunes and misunderstandings brings the action to a threateningly low point, after which some fortunate twist in the plot sends the conclusion up to a happy ending.”⁶⁵ The biblical narrative as interpreted by Augustine, Ricoeur and others, begins on a high plateau; a good created paradise. Yet a series of misfortunes occur – humanity turning their back on God at several points, but most pertinent to the current discussion, Adam’s succumbing to temptation. This leads to a long period of suffering as punishment. The structure of the narrative of course eventually takes an upward turn and reaches its culmination with our salvation by Christ, as Frye explains, “The entire Bible, viewed as a ‘divine comedy,’ is contained within a U-shaped story of this sort, one in which man, as explained, loses the tree and water of life at the beginning of Genesis and gets them back at the end of Revelation.”⁶⁶ Of course, this is an approximate and overarching description of the biblical narrative, within which there are numerous stories of the triumphs and tragedies of Israel, and indeed further U-shaped narratives such as the Book of Job and Jesus’ parable of the Prodigal Son.⁶⁷ Understanding the biblical narrative with this U-shaped, comedic structure again illustrates that at the first apex of the narrative, goodness was presumed; the low period of suffering was explained as the result of humanity’s actions.

⁶⁵ Northrop Frye, *The Great Code: The Bible and Literature*, (New York: Harvest, 1982) p. 169

⁶⁶ *Ibid.*, p. 169

⁶⁷ *Ibid.*, p. 169

1.4.1 Sin and Human Nature

Another feature of the Adamic myth which characterises traditional thinking on good and evil pertains to the nature of humanity itself. In any given tradition, the structure of ethics is bound to reflect important features of human nature, whatever those features are perceived to be in that given tradition. This premise holds true in the traditional Christian view of good and evil. It was already evidenced (section 1.3) that pre-Darwinian ethical frameworks maintained somewhat of a preoccupation with the question ‘whence comes evil?’ The traditional Augustinian view provides a response to this question which relates to how we view human nature; evil came from humanity.⁶⁸ At the risk of oversimplifying, Augustine postulates that evil arrived into the good creation as a result of human sin. This is allegorically portrayed through the Adamic myth; Adam, the story’s central protagonist, represents humanity by way of his being a primordial ancestor of the human race. Ricoeur makes an interesting clarification on this point. He suggests that Adam is portrayed as sharing our condition.⁶⁹ In other words, he denounces what he believes to be a popular interpretation of Adam; that he was in some senses, a special or supernatural human. Ricoeur is highly cautious about even using the term ‘fall’ because for him, this implies that Adam was somehow elevated above the present human condition.⁷⁰ Furthermore, he perceptively notes that the word ‘fall’ is alien to the scriptural text. A vision of a primordial superhuman – which Ricoeur explains is evident in Plato, Plotinus and gnosis – may diminish or distort the weight of the anthropological message; the Adamic myth is strictly anthropological in Ricoeur’s reading.⁷¹

The associations, both between Adam and humanity, and between humanity and evil/sin, are not however, to be understood as a proclamation of the fundamental evilness of

⁶⁸ Augustine, *Against Julian*, trans. Matthew A. Schumacher, (New York: Fathers of the Church, 1957) p. 45

⁶⁹ Paul Ricoeur, *The Symbolism of Evil*, p. 233

⁷⁰ *Ibid.*, p. 233

⁷¹ *Ibid.*, p. 233

humanity. This interpretation has been, according to Richard McBrien, one of the most common misunderstandings of original sin.⁷² The prevailing Augustinian understanding of humanity is more nuanced than this, particularly as he incorporates an understanding of free will. Within the myth itself, freedom as a concept is only implicit, apparent in the original defection.⁷³ Augustine incorporated the idea from Tertullian, who in turn was influenced in this regard by the Stoics.⁷⁴ Humans, Augustine argued, have the freedom to make autonomous choices. Freedom is an important prerequisite for moral choices; it is necessary that for actions to have moral worth, actions must be freely chosen (being mindful that the concept of ‘freedom’ is open to multiple interpretations – the theme of free will will be also be important for my central argument presented in later chapters).

For Augustine, there are limits to freedom, unlike Pelagius who proposed that humanity is completely free.⁷⁵ Alister McGrath explains a useful analogy which Augustine used to illustrate his thinking on this matter: a set of scales with two balance pins, one representing good, one representing evil. The scales represent human judgement, and are loaded in favour of evil. The scales, or human free will, still works, but a strong bias exists towards evil. Original sin affects all humanity and is inherited from Adam; it has compromised the human mind.⁷⁶ This weighting towards evil is understood by Augustine to be pride; Adam and Eve voluntarily succumbed to pride thus begetting sin.⁷⁷

Discontent with their human nature, they needed more; they sought to be like God. The myth of Adam is then in part a myth of temptation, illustrating humanity’s inclination towards evil.⁷⁸ At this point, the peripheral characters such as the serpent and Eve play some role. Yet as Ricoeur again explains, they are counterpoles, not be taken as “multiplication of

⁷² Richard McBrien, *Catholicism: I*, p. 162

⁷³ *Ibid.*, p. 234

⁷⁴ Alister McGrath, *Christian Theology*, p. 444

⁷⁵ *Ibid.*, p. 444

⁷⁶ *Ibid.*, pp. 444-445

⁷⁷ William E. Mann, ‘Augustine on Evil and Original Sin’, Eleonore Stump and Norman Kretzmann eds., *The Cambridge Companion to Augustine*, p. 47

⁷⁸ Paul Ricoeur, *The Symbolism of Evil*, p. 252

the centres of the proliferation of evil”; they do not detract from Adam’s centrality.⁷⁹ There is no doubt that Adam is the key figure, the tragic hero. This idea lies at the centre of Augustine’s dominant theodicy, “that free will is the cause of our doing evil and that thy just judgement is the cause of our having to suffer from its consequences.”⁸⁰ As Augustine himself articulates, “This covers the whole range of evil, i.e. sin and its penalty.”⁸¹ This is a focus of the traditional understanding of good and evil, and human nature; humanity is inclined towards sin and responsible for evil. Every instance of pain and suffering can be accounted for by reference to humanity’s dubious moral character.

1.4.2 Suffering as Punishment

Another related characteristic of the predominant Christian framework for understanding good and evil is the notion of punishment. Punishment is a prevalent theme throughout classical literature, an exemplar being Prometheus’ rebellion and subsequent enslavement. It appears regularly throughout the Hebrew scripture, for example in the Egyptian plagues (Exod. 7:4), the destruction of Sodom and Gomorrah (Deut. 29:23) and elsewhere. The Adamic myth however, portrays an elaborate and dramatic exposition of the law of retribution, which is conspicuous in how Augustine and Christianity came to understand good and evil. It is through retribution that suffering, the symptom of evil, becomes apparent. Indeed, it may be convincingly argued that evil is deprived of any meaning without its symptom; suffering. As discussed in section 1.3, evil, like good, may not have any intrinsic properties at all; a debated topic in moral philosophy.⁸²

Drawing from the punishments of Adam and Eve, Augustine’s theology develops a legalistic character; sin must be forbidden by divine directive – a characteristic of ethical

⁷⁹ Ibid., pp. 233-234

⁸⁰ Quoted in John Hick, *Evil and the God of Love*, p. 59

⁸¹ Augustine, *On True Religion*, John H.S. Burleigh trans. and ed., *Augustine: Earlier Writings*, (Philadelphia: Westminster, 1953) p. 236

⁸² See Alasdair MacIntyre’s discussion in *A Short History of Ethics*, pp. 240-261

history explored in section 1.2. Interestingly, it has been suggested by theologian Nancey Murphy and scientist George Ellis that Augustine's context of living within an authoritarian ecclesiastical society may have influenced his thought in this regard.⁸³ In any case, a cardinal feature of Augustine's understanding of good and evil is, as Ricoeur writes, that "suffering is the price for the violation of order."⁸⁴ Having established that sin enters the world through Adam, it is logical that a punishment should follow. Ricoeur posits that nothing could be more rational; crime merits chastisement.⁸⁵ Hick's views are concurrent in his reading of Augustine and the prospect of 'moral balance'. Sin is balanced out by punishment; sin is not allowed to "mar the perfection of God's universe, because the balance of the moral order is preserved by the infliction of appropriate punishment."⁸⁶ This issue is the bedrock of Augustine's theodicy, and hence the preeminent understanding of good and evil; suffering is the result of human sin, it is our punishment, "The theodicy-tradition, which has descended from Augustine through Aquinas to the more tradition-governed Catholic theologians of today... teaches that all evil that indwells or afflicts mankind is, in Augustine's phrase, 'either sin or punishment for sin'."⁸⁷ From this, Augustine "constructed the idea of natural guilt inherited from the first man" to explain suffering within the scheme of crime and punishment.⁸⁸

At this point it must be acknowledged that there are legitimate difficulties in the Augustinian understanding of good and evil. Both Hick and Ricoeur make reference to this. Hick asserts that Augustine's preoccupation with sin and punishment is in direct conflict with the Christian impulses underlying the theodicy question (presumably, those of the

⁸³ Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, (Minneapolis: Fortress, 1996) p. 248

⁸⁴ Paul Ricoeur, *A Symbolism of Evil*, p. 30

⁸⁵ Paul Ricoeur, 'Interpretation of the Myth of Punishment', trans. Robert Sweeny, *The Conflict of Interpretations*, p. 354

⁸⁶ John Hick, *Evil and the God of Love*, p. 87

⁸⁷ *Ibid.*, p. 173

⁸⁸ Paul Ricoeur, "'Original Sin': A Study in Meaning", p. 281

goodness of God).⁸⁹ Hick sees some promise in Augustine's theodicy, in that it seeks to bring good out of evil by overruling the malicious deeds of the wicked through punishment.⁹⁰ However, the overwhelming emphasis on the sinful nature of all mankind forces Hick to eventually search elsewhere for a solution to the theodicy problem.⁹¹ Anselm of Canterbury also expressed concerns regarding the sin-punishment framework for understanding evil. Anselm understood the need for punishment, yet he was cautious in how this should be expressed; he was clear to distinguish between punishment as a love of justice rather than as an unjust torment.⁹²

Similarly, Ricoeur pre-empts a substantial challenge to this potent vision; why is the suffering-as-punishment inflicted upon humanity as a whole?⁹³ Paul proclaimed that sin entered the world through one man (Rom. 5:12), though why must the sin and punishment necessarily damn all of humanity to a life of suffering? Original sin may also lie opposed to the theme of Job; the suffering of the just man, which for Hans Küng portrays human perseverance and suffering as a way to be with God, as opposed to a punishment for sin.⁹⁴ Moreover, there are further issues with Augustine's theodicy in light of evolutionary theory, which will be explored in section 1.6. Notwithstanding these considerable deficiencies, the expiatory vision most prominently asserted by Augustine has been, in Ricoeur's words, "the most orthodox tradition of Christianity."⁹⁵ As such, it goes some way in providing a backdrop against which an evolutionary understanding of 'good' can be contextualised and contrasted. This powerful philosophy even transcended specifically Christian thinking, which gives further weight to this assertion.

⁸⁹ John Hick, *Evil and the God of Love*, p. 89

⁹⁰ *Ibid.*, p. 89

⁹¹ *Ibid.*, p. 89

⁹² Anselm, *Cur Deus Homo*, trans. Jasper Hopkins and Herbert Richardson, *Complete Philosophical and Theological Treatise of Anselm of Canterbury*, (Minneapolis: Arthur J. Banning, 2000) p. 307. This point is taken from Anselm's discussion on the instrumentality of the devil.

⁹³ Paul Ricoeur, "Original Sin": A Study in Meaning', p. 281

⁹⁴ Hans Küng, *On Being a Christian*, p. 434

⁹⁵ Paul Ricoeur, "Original Sin": A Study in Meaning', p. 281

1.5 The Legacy of Original Sin

A primary theme of the doctrine of original sin as explored above is the imperfect nature of the human species. Augustine's view could be interpreted as insisting that humanity is fundamentally flawed, or at least that we are inclined to do wrong. Although stemming from a specifically religious origin, this concept has resurfaced in various forms throughout philosophies that do not intentionally have religious motives, or in cases, have decisively anti-religious motives. Rousseau is an interesting example, though not quite as definitive as Arthur Schopenhauer or Hegel, three thinkers to be considered here briefly for their thoughts regarding on original sin.

The original sin, Augustine argued, emerged through pride; Adam and Eve had a prideful want for more.⁹⁶ There is a striking similarity between this concept of pride causing original sin, and Rousseau's idea of *amour propre* or exorbitant self-love. Berkeley philosopher Niko Kolondy explains *amour propre* as a concern to be equal or superior to others in basic worth or standing.⁹⁷ A common reading of Rousseau interprets this self-love as the catalyst for humanity to be wicked.⁹⁸ In this regard, however, Rousseau's philosophy is more nuanced. *Amore propre* in itself is not necessarily the cause of humanity's evil; it is only when humanity is placed within the context of civilisation that *amore propre* becomes inflamed and thus, results in wicked actions. It is the circumstances of society which "makes *amore propre* inevitable."⁹⁹ Later, Jean-Paul Sartre offered a comparable reflection on original sin; it arose only in relation to an 'other', (though Sartre was more focused on 'guilt' as opposed to Rousseau's focus on pride or *amore propre*) "Original sin is my

⁹⁶ William E. Mann, 'Augustine on Evil and Original Sin', p. 47

⁹⁷ Niko Kolodny, 'The Explanation of Amour Propre', *Philosophical Review*, 119.2 (2010) p. 170

⁹⁸ *Ibid.*, p. 168

⁹⁹ *Ibid.*, p. 168

upsurge in a world where there are others.”¹⁰⁰ Humanity, for Rousseau (and Sartre), is naturally good – it is our relationships with each other that brings out our evil.

Here a disparity between Rousseau and original sin could be perceived. Indeed, Rousseau himself felt that he was diverging from original sin; he even uses the term in denouncing it, “Let us lay it down as an incontrovertible rule that the first impulses of nature are always right; there is no original sin in the human heart, the how and why of the entrance of every vice can be traced.”¹⁰¹ However, if one makes a genuine comparison between Rousseau’s concept of inordinate self-love and the Adamic myth, parallels can still be drawn. Ricoeur recognises this, as he recalls how the Adamic tradition views humanity as created good, as a part of a good creation (explored in section 1.2). It was later that the prideful desire corrupted Adam, “This is what Rousseau generally understood: man is ‘naturally good’, but we know him under the regime of civilisation – that is to say, of history, only as ‘depraved’.”¹⁰² In both Rousseau and in Genesis, we can see humanity created good, and then being inclined towards evil. There are, as noted, subtle differences between the two views such as Rousseau’s emphasis on natural goodness over the Augustinian emphasis on natural sinfulness. Yet Bertrand Russell is perhaps audacious as he presents Rousseau’s philosophy as the “antithesis of the doctrine of original sin...”¹⁰³ Hermeneutically, Russell’s reading of Rousseau may be well-founded, particularly given Rousseau’s own views cited above. It may also stem from inherent inconsistencies in Rousseau’s own work, which have been noted by commentators.¹⁰⁴ Russell’s statement does seem overconfident however, in light of the fact both Rousseau’s *amour propre* and original sin concur that humanity, at least in its present condition, is inclined toward wicked actions

¹⁰⁰ Jean-Paul Sartre, *Being and Nothingness*, trans. Hazel Barnes, (New York: Washington Square, 1984) p. 410 [Originally published 1943]

¹⁰¹ Jean-Jacques Rousseau, *Emile*, trans. Barbara Foxley, (London: Dent, 1974) p. 56 [Originally published 1762]

¹⁰² Paul Ricoeur, *The Symbolism of Evil*, p. 252

¹⁰³ Bertrand Russell, *The History of Western Philosophy*, p. 626

¹⁰⁴ For example, Denis Lawton and Peter Gordon, *The History of Western Educational Ideas*, (London: Woburn, 2002) p. 94

as a result of our hubris. Thus, Rousseau's philosophy and view of sin still fits within the asymmetrical framework of primordial goodness, with evil as the phenomenon in need of explanation.

A less controversial instance of original sin's legacy can be found in the philosophy of Schopenhauer, who has been described as a pessimistic philosopher.¹⁰⁵ Unlike Rousseau, he is explicit in acknowledging his Augustinian influence, and writes admiringly on original sin. For present purposes, it is worth noting that Schopenhauer agrees with the general sentiment of this chapter thus far; that original sin holds a privileged place within Christianity, and hence, within a Christian understanding of good and evil, "Certainly, the doctrine of original sin (assertion of the will) and of salvation (denial of the will) is the great truth which constitutes the essence of Christianity...."¹⁰⁶ Drawing heavily from Augustine and the reformer Martin Luther, Schopenhauer argues that the human will has a natural and inescapable inclination towards evil.¹⁰⁷ He even goes as far as to decry Pelagius' vision of humanity as freely morally balanced as "vulgar".¹⁰⁸ Likewise, Nietzsche, though highly critical of the dogma of original sin, maintains that morality itself is a tyranny against our nature and reason.¹⁰⁹ This could be interpreted as viewing humanity as having a decisively anti-moral predisposition, congruent with Augustine's vision of a natural inclination toward evil. The theme of a natural inclination toward evil is thus substantially evident even beyond Christian theology.

Another Augustinian theme explored above which has influenced philosophy is the notion of punishment, explored in section 1.4.2. Hegel, for example, engages in a complex and nuanced analysis of the notion of punishment, and whether or not punishment should be

¹⁰⁵ Bertrand Russell, *A History of Western Philosophy*, p. 681

¹⁰⁶ Arthur Schopenhauer, *The World as Will and Idea*, trans. R.B. Haldane and J. Kemp, seventh ed., (London: Kegan Paul, Trench, Trübner & Co. 1903) p. 518 [Originally published 1818]

¹⁰⁷ *Ibid.*, pp. 518-521

¹⁰⁸ *Ibid.*, p. 519

¹⁰⁹ Friedrich Nietzsche, *Beyond Good and Evil*, p. 77. For a critical analysis of Nietzsche's rejection of original sin, see Irish theologian Martin Henry, 'Original Sin: A Flawed Inheritance', *Irish Theological Quarterly*, 65.1 (2000) pp. 3-12

used as a deterrent. Hegel expresses scepticism towards punishment strictly for retribution sake, though he does believe in punishment.¹¹⁰ Hegel expresses concern about the motives for punishment, and particularly Feuerbach's view that punishment must follow crime if the criminal knew about the punishment.¹¹¹ He expresses anxiety for if such a stringent causal approach to crime and punishment is adopted, then this may lead to indignation. He worries that this negates human freedom and dehumanises individuals.¹¹² However, his philosophy of morality could be understood as being characterised in some respects by a 'crime and punishment' model from this qualifying remark, "The immediacy which is superseded in crime thus leads, through punishment... to affirmation, i.e. to morality."¹¹³ Despite his cautious approach, therefore, punishment is still a striking theme in Hegel's philosophy.

Richard McBrien asserts that whilst original sin has indeed been an influential doctrine, it has often been presented with pessimistic connotations. He feels that such pessimism is a profound misreading of the doctrine and cites Sartre's pessimistic existentialism as an example of such misunderstanding; that we are radically and thoroughly flawed and are helpless in this sinful condition.¹¹⁴ Schopenhauer can also be cited as an archetypal example of deriving pessimism from original sin, because as noted above he is explicit in his admiration of the idea. Schopenhauer views humanity as condemned to sinfulness; our works can never save us.¹¹⁵ Like Sisyphus, condemned for all eternity by Zeus to push a boulder up a hill in what Albert Camus described as a "futile and hopeless labour", we are destined to be imperfect no matter how hard we try.¹¹⁶

¹¹⁰ Peter Steinberger, 'Hegel on Crime and Punishment', *The American Political Science Review*, 77.4 (1983) p. 869

¹¹¹ G.W.F. Hegel, *Elements of the Philosophy of Right*, trans. H.B. Nisbet, Allen W. Wood ed., (Cambridge: Cambridge University Press, 1991) p. 125 [Originally published 1821]

¹¹² *Ibid.*, pp. 125-126

¹¹³ *Ibid.*, p. 132

¹¹⁴ Richard McBrien, *Catholicism: I*, p. 163

¹¹⁵ Arthur Schopenhauer, *The World as Will and Idea*, p. 519

¹¹⁶ Albert Camus, *The Myth of Sisyphus*, trans. Justin O'Brien, (London: Hamish Hamilton, 1955) p. 96 [Originally published 1942]

McBrien reiterates the point that original sin has little biblical basis, particularly in the Old Testament, and has been unfortunately misunderstood throughout history. Consequently, he downplays the idea of original sin and suggests that it no longer plays a major role in modern Catholic theology, and has even less of a role in Protestant theology.¹¹⁷ However, notwithstanding McBrien's remarks on the curtailing of original sin in theology, several modern theologians have persisted in one form or another with the doctrine of original sin, albeit with the Augustinian emphasis on sinfulness understated. Within modern theology, salient examples of the legacy of the doctrine of original sin can still be evidenced. Although certain theologians have moved away from the idea (this will be made evident in Chapter Three, particularly in light of evolutionary theory), we can still see examples of some of its themes.

A recent discussion on modern attempts at persisting with original sin is provided by anthropologist Jonathan Chappell. In reviewing recent literature, such as theologian Raymund Schwager's *Banished from Eden: Original Sin and Evolution*, Chappell notes how certain scholars are keen to uphold the historicity of the fall because of its perceived importance in Catholicism.¹¹⁸ However, such attempts seem to be merely searching for scientific consistencies in embryology and other sciences to corroborate the notion of hereditary transmission of sin.¹¹⁹ Unfortunately, these approaches do not take into account the fact that Augustine's model of original sin preceded our understanding of genetic inheritance by over a millennium, before Gregor Mendel began to study nature's methods of genetic transmission in the nineteenth century. Nor do they enter into the 'nature vs. nurture' debate; how much of our behavioural characteristics are biologically inherited and how powerful of a role does culture have?

¹¹⁷ Richard McBrien, *Catholicism: Vol 1*, p. 162

¹¹⁸ Jonathan Chappell, 'Raymund Schwager: Integrating the Fall and Original Sin with Evolutionary Theory', *Theology and Science*, 10.2 (2012) pp. 179-198

¹¹⁹ *Ibid.*, p. 185

As such, any consistencies between scientific understandings of trait transmission and Augustine's work are incidental. As Karl Barth wrote, "we miss the unprecedented and incomparable thing which the Genesis passages tell us of the coming into being and existence of Adam if we try to read and understand it as history, relating it either favourably or unfavourably to scientific palaeontology...."¹²⁰ Somewhat more viable positions on original sin are also defended by contemporary thinkers such as John Polkinghorne, who suggests that the primordial 'turning away' from God is symbolic of the dawning of human consciousness.¹²¹ Similarly, R.J. Berry suggests that Adam could be taken not as a historical individual, but as the first 'spiritual' human.¹²² Therefore, we can assert that the doctrine still has advocates today, albeit shaped differently to accommodate modern understandings of science.

Further instances of the lingering influence of Augustine's account of original sin are according to British scholar Oliver Bennett, evident in the writings of John Paul II. Quoting from John Paul II's *Crossing the Threshold of Hope*, Bennett suggests that the late Pope is "unwilling to let go of the concept of divine justice that reserves the hope of eschatological reward... whilst meting out punishment to those seen to deserve it."¹²³ Whilst John Paul II did indeed make statements to justify Bennett's assessment, it could be argued that it is an unfair classification. John Paul II does give due importance to the theological theme of justice, though he also gives forgiveness primacy and repeats that the two cannot be untwined – this may be seen to echo Anselm's distinction between punishment as a love

¹²⁰ Karl Barth, *Church Dogmatics: IV.1* trans. G.W. Bromley, G.W. Bromley and T.F. Torrance eds., (Edinburgh: T&T Clarke, 1994) p. 508 [Originally published 1953]

¹²¹ Quoted in John Bimson, 'Doctrines of the Fall and Sin After Darwin', Michael Northcott and R.J. Berry eds., *Theology After Darwin*, (Milton Keynes: Paternoster, 2009) p. 116

¹²² R.J. Berry, 'Review of Norman C. Nevin ed., *Should Christians Embrace Evolution? Biblical and Scientific Responses*', *Science and Christian Belief*, 22.2 (2010) p. 208

¹²³ Oliver Bennett, 'The Manufacture of Hope: Religion, Eschatology and the Culture of Optimism', *International Journal of Cultural Policy*, 17.2 (2011) p. 123

of justice and punishment as torment discussed in section 1.4.2.¹²⁴ Nevertheless, the theme of justice is still evident in John Paul II, even if Bennett might be too strong in his realisation of this. Understanding the context of good and evil through this expiatory or crime-punishment model, however, presents significant theological problems, despite its prevalence throughout history. Understanding the context of morality in terms of punishment could negate moral actions, if those actions are only being carried out because of the fear of punishment. This is the perspective of morality offered by Kant, who views the motives of actions as the criteria of demarcation between moral and immoral, “What counts is not actions, which one sees, but those inner principles of actions which one does not see.”¹²⁵ This is the great flaw in Pascal’s wager, which states that one should believe in God if only because the consequences of disbelief are so great in comparison with the relatively little effort one must exert by believing.¹²⁶ Do these disingenuous motives not diminish the perceived ‘goodness’ of the actions? Kant would argue yes, that actions do not have moral worth if they are precipitated by disingenuous motives, though others of course may not agree. Hick makes similar remarks, as he suggests that good actions that arise out of free and responsible decisions are more valuable than good deeds done merely out of necessity.¹²⁷

There arises then an interesting contrast between moral actions out of self-interest and moral actions out of a genuine desire to be good. Such a distinction is explored at length in Swedish theologian Anders Nygren’s significant work *Agape and Eros* published in the 1930s. Nygren uses the Greek distinctions between two kinds of love (*Agape* and *Eros*) to demonstrate how one (*eros*) describes loving actions emerging from ultimately self-

¹²⁴ John Paul II, ‘No Peace Without Justice, No Justice Without Forgiveness’, (Rome: 2001) http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_20011211_xxxv-world-day-for-peace_en.html accessed 15th Aug. 2012

¹²⁵ Immanuel Kant, *Groundwork of the Metaphysics of Morals*, pp. 19-20

¹²⁶ Blaise Pascal, *Pensées*, (London: Penguin, 1979) pp. 149-155 [Originally published 1669]

¹²⁷ John Hick, *The Philosophy of Religion*, (New Jersey: Prentice Hall, 1983) p. 45

gratifying motives, whilst the other (*agape*) is a genuine, selfless love.¹²⁸ Nygren identifies *agape* as the only true source of Christian love, and thus, in a somewhat Kantian manner, the source of true morality. Pertaining to the topic under discussion at present, acting out of fear of punishment could be equated to Nygren's understanding of *eros*.¹²⁹ The Kantian outlook of sharply distinguishing motives from actions is an intriguing and oft debated issue, which is a significant aspect of the context of understanding good and evil. Furthermore, this point becomes even more conspicuous in the field of evolutionary ethics, which will be engaged with in more detail in the next chapter. Therefore, it is an interesting aspect of the traditional theological understandings of good and evil.

Although the influence of original sin still lingers in some areas, what is common in more modern theology is to shift the emphasis away from the 'sinful' nature of humankind, and toward the salvific event of Christ. The emphasis on Christ's saving actions rather than the sinfulness of Adam characterises and differentiates the major theologians of the twentieth century, such as Karl Barth, Karl Rahner and Jürgen Moltman. Rahner explains the premise as follows, "It may be assumed that sin was only permitted by God within the domain of his unconditional and stronger salvific will, from which beginning was directed towards God's self-communication in Christ."¹³⁰ Ricoeur also emerges as a proponent of this school of thought with his statement, "We never have the right to speculate on either the evil that we inaugurate, or on the evil that we find, without reference to the history of salvation."¹³¹ Such a shift in emphasis will be explored in more detail in Chapter Three, though ultimately, I will argue for a more immanent and present conception of hope

¹²⁸ Philip Watson, 'Translator's Preface', Anders Nygren, *Agape and Eros*, trans. Philip Watson, (Philidelphia: Westminster, 1953) p. vii [Originally published 1932]

¹²⁹ Benedict XVI in his encyclical *Deus Caritas Est*, suggests that such debate has drawn too sharp a distinction between the two forms of love and much confusion has been caused as a result of translations. He argues that these kinds of love cannot be separated and are all elements of Christian love. Benedict XVI, *Deus Caritas Est*, (Rome: 2005) http://www.vatican.va/holy_father/benedict_xvi/encyclicals/documents/hf_ben-xvi_enc_20051225_deus-caritas-est_en.html 19th Sept. 2013

¹³⁰ Quoted by Richard McBrien, *Catholicism: I*, p. 165

¹³¹ Paul Ricoeur, "'Original Sin': A Study in Meaning", p. 286

than theological views which emphasise an ultimate salvation. Also, it is noticeable that a refocused emphasis on salvation still adheres to the U-profiled comedic structure of the Augustinian reading of the biblical narrative mentioned in section 1.4; a presupposed goodness tainted by humanity's turning away, even if to be eventually restored.

1.6 Problems with Original Sin as a Theodicy in Light of Darwin

Heretofore, this chapter has explored the context of the predominant model for understanding good and evil, as expressed largely through the Augustinian theodicy tradition. Particular features of this influential outlook were presented in order to provide a backdrop for this thesis with its focus on evolutionary ethics. Whilst carefully acknowledging that the framework for understanding good and evil presented in the writings of Augustine and more modern commentators (Hick, Ricoeur, etc.) is just one model among many, it was evidenced just how pervasive this understanding is by mentioning many important philosophers and theologians who have adopted various aspects of it. In light of Darwin's theory of evolution by natural selection, however, this model for understanding good and evil becomes highly problematic. Reasons for this will now be briefly discussed, which indicate the need for a deeper engagement with relevant aspects of current evolutionary theory. The issues outlined below essentially demonstrate why a new perspective on understanding good and evil is required in light of evolution. Attempts at which will be elaborated on in more detail in later chapters.

1.6.1 Issues with the Asymmetry of A Primordial Good and Conspicuous Evil

Perhaps the most salient issue that evolutionary theory presents to the traditional understanding of good and evil is the abolition of the notion of a primordial good, thus posing a strong challenge to the dominant asymmetrical view of a presupposed good and a

requirement to explain evil. Evolutionary theory forced us to fundamentally alter our view of time-scales and the proportion of biological history that humans have inhabited; we were not specially created amongst other creatures but only arrived on the evolutionary scene in comparatively immediate history. The American philosopher Daniel C. Dennett often quotes, in writing and lectures, Robert Beverly MacKenzie, an early critic of Darwin:

In the theory with which we have to deal, Absolute Ignorance is the artificer; so that we may enunciate as the fundamental principle of the whole system, that, *in order to make a perfect and beautiful machine, it is not requisite to know how to make it*. This proposition will be found, on careful examination, to express, in condensed form, the essential purport of the Theory, and express in a few words all Mr. Darwin's meaning; who by a strange inversion of reasoning, seems to think Absolute Ignorance fully qualified to take the place of Absolute Wisdom in all the achievements of creative skill.¹³²

Dennett draws attention to Darwin's "strange inversion of reasoning"; the fact that apparent design need not in an evolutionary view, be designed. Darwin's theory of evolution, then, could be argued to represent a decisive shift in how we view the world, as opposed to being a purely scientific theory. Viewing biological life, and indeed the world, as an evolving process is a significant shift in attitude from either the traditional image of a static creation, or the resignation to ignorance. A prolonged and transformational process is a substantially different worldview, one which is deeply enigmatic but also simultaneously logical – the strong survive and propagate. Evolution changes our simplistic appreciation of causality by allowing randomness to precede order; it becomes more dynamic than the assumption that design necessarily implies a designer. As such, evolution possesses substantial philosophical and theological import – such themes will be explored in greater depth in later chapters.

¹³² Daniel C. Dennett, *Darwin's Dangerous Idea: Evolution and the Meanings of Life*, (London: Penguin, 1995) p. 65

Dennett, among many others, has therefore enthusiastically defended the philosophical significance of evolutionary theory.¹³³

There are however, those who insist that scientific theories such as evolution should be confined to science and not be incorporated into other areas such as theology and religion. Perhaps the most renowned proponent of such a view was Stephen Jay Gould, who developed the methodological approach known as ‘NOMA’ or non-overlapping magisteria. Gould was particularly concerned with the fields of science and religion, and suggested the delineation of certain topics into each of these fields.¹³⁴ However, as I will demonstrate throughout this thesis, evolutionary theory does in fact have profound implications for the fields of theology, religion, philosophy, and particularly ethics, a subset of these fields. Moreover, Gould’s advocacy of his NOMA approach is in itself wrought with inconsistencies. For example, he acknowledges that evolution presents an authoritative challenge to the prospect of a soul infused in humans indicating our superiority over other animals. Yet he maintains in vain that evolution does not infringe on this religious belief.¹³⁵ Gould’s thesis may hold true in certain instances; for example, the atomic weight of nitrogen may bear no impact on theological ideas, but presenting it as a universal approach is deeply inadequate. A far more robust position is defended by MacIntyre, who realises that traditional academic disciplinary boundaries which compartmentalise thought, distorts and obscures key principles of those disciplines.¹³⁶

With regard to envisioning original sin in light of evolutionary theory, Nancey Murphy and George Ellis, in their study *On the Moral Nature of the Universe*, demonstrate difficulties that evolutionary theory presents for the traditional Augustinian theodicy with its presuppositions of primordial goodness. They correctly note that because humans are

¹³³ Ibid., p. 21

¹³⁴ Stephen Jay Gould, ‘Nonoverlapping Magisteria’, *Leonardo’s Mountain of Claims and the Diet of Worms: Essays on Natural History*, (New York: Random House, 1998) pp. 269-284

¹³⁵ Ibid., p. 284

¹³⁶ Alasdair MacIntyre, *After Virtue*, p. 264

essentially an infantile species within the grand scheme of evolution, tens of millions of years of animal suffering preceded our existence; there is no sign of a primordial goodness. However, theologians such as Christopher Southgate are cautious in this regard. He worries about over-sentimentalising animal experience in what he terms “bambi theology.”¹³⁷ Although he does not wish to minimise the extent of animal suffering, he acknowledges the essential role of animal suffering in evolution; for example, the suffering of a deer at the hands of predators or disease may ultimately benefit the group of deer given that they will not grow too numerous for their resources and perhaps all starve.¹³⁸ The evolved pseudo-immunity to certain diseases also emerges from the suffering of many from the disease. However, what is at issue here pertains more to the fact that human suffering is essentially animal suffering; we are animals. Although as Southgate rightly points out, positives often emerge from suffering, such suffering still precedes us, and thus the image of a primordial good seems inappropriate.

Consequently, Augustine’s postulation that human sin is the direct cause of suffering and evil in the world is incoherent with our current knowledge of life’s origins.¹³⁹ The theologian Holmes Rolston III offers a concurrent perspective, “Suffering in a harsh world did not enter chronologically after sin and on account of it. There was a struggle for long epochs before the human arrival....”¹⁴⁰ Indeed, as it will be argued in later chapters, goodness is extremely recent in evolutionary history and thus, the traditional notion of primordial goodness seems untenable. For this reason and others, Murphy and Ellis become highly critical of the Augustinian model of original sin. They acknowledge how the

¹³⁷ Christopher Southgate, *The Groaning of Creation: God, Evolution and the Problem of Evil*, (London: Westminster John Knox, 2008) p. 6

¹³⁸ Of course, this is an oversimplified example which serves only to illustrate; evolutionary developments are more multifaceted and interloped with other developments, for example, as deer evolve to be better at avoiding predators or neutralising diseases, so too do predators and diseases evolve to become better at catching them or fighting their immune systems. Biologist Richard Dawkins has described such interloped evolutionary lineages as evolutionary ‘arms races’, Richard Dawkins and John R. Krebs, ‘Arms Races between and within Species’, *Proceedings of the Royal Society*, 205.1161 (1979) p. 489

¹³⁹ Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, p. 245

¹⁴⁰ Quoted in *Ibid.*, p. 245

Augustinian sequential view of a paradise lost by human transgression becomes deeply problematic in light of our understanding of the history of life, and thus support Hick's repudiation of it.¹⁴¹

Although Murphy and Ellis are correct in highlighting the disparity between Augustine's original sin and the knowledge of our origins acquired from the study of evolution, it could be argued that they are too strident in their denunciation of his work. It is no intellectual victory to outthink a scholar who is separated from the knowledge one has by a millennium and a half. Augustine should not be too harshly criticised for his mistakes with regard to his ignorance of the pre-human world because he simply did not have the same information available to him that we do (though there are of course other reasons for rejecting his view, as Hick explores).¹⁴² Augustine himself should be commended for at least recognising the allegorical nature of the creation narrative as expressed in Genesis, as he equates the figurative days to ages of creation.¹⁴³ Even though Augustine was eventually subject to empirical refutation, he went some way in contributing to our understanding of human nature through his hermeneutical appreciation of Genesis. Yet, it still must be firmly asserted that evolutionary theory significantly erodes Augustine's theodicy because of his presuppositions of a primordial goodness gone awry, and his explanation of evil in terms of human sin.

1.6.2 The Measure of Suffering

A similar difficulty which evolution poses to the traditional understanding of good and evil pertains to the measure of suffering apparent in the natural world and its centrality in the creative process of natural selection. The creative process of evolution is incomprehensibly violent and competitive, exemplified in Darwin's *Ichneumonidae* and understood as "red in

¹⁴¹ Ibid., p. 244

¹⁴² John Hick, *Evil and the God of Love*, p. 89

¹⁴³ Augustine, *On Genesis: A Refutation of the Manichees*, p. 62

tooth and claw” – such principles are presuppositions of evolutionary ethics to be explored in the next chapter.¹⁴⁴ Traditional theodicies, such as the pervasive Augustinian model, were not formulated with the understanding of just how vast the timescales of evolution are, and thus, how extensive the apparent suffering and wastage of the process is. This realisation, as Alister McGrath asserts, goes far beyond the concerns of traditional theodicy.¹⁴⁵ He articulates that our understanding of Darwinian evolution greatly exacerbates the original problem of evil.¹⁴⁶ The measure of suffering that has become apparent through our knowledge of evolution may thus be taken as another significant challenge to the traditional theo-centric framework for understanding good and evil; the asymmetry of a presupposed goodness seems to be at odds with the essential role of death, struggle and competition in evolutionary history.

At this point, one could raise an objection that echoes Spinoza’s mentioned in section 1.3. Whilst we can appreciate that there is a great deal of suffering, one could ask, suffering for whom? It could be that the interpretation of natural selection as a process teeming with suffering is only understood as such through a particular hermeneutical lens. The emotive language we use in discussions on the matter – pain, suffering, red in tooth and claw, etc. – may be skewing perceptions. Gould makes this point as he suggests that understanding the natural world as exceptionally vicious and in need of metaphysical and theological defence may be just one hermeneutical understanding; a hermeneutic which has emerged from a context steeped in violence itself, “measured in terms of battles won and enemies destroyed.”¹⁴⁷ A similar critique can be found with Rolston, as he offers an alternative to the more common ‘red in tooth and claw’ perspective on evolution. He

¹⁴⁴ Phrase taken from Alfred Lord Tennyson’s ‘In Memoriam A.H.H’.

¹⁴⁵ Alister McGrath, *Darwinism and The Divine*, (West-Sussex: Wiley-Blackwell, 2011) p. 202

¹⁴⁶ *Ibid.*, p.202

¹⁴⁷ Stephen Jay Gould, *Ever Since Darwin*, (London: Penguin, 1977) p. 88

suggests that the evolutionary struggle is best characterised as a sacrificial tragedy, exemplified in Christ's passion, though a tragedy from which beauty emerges:

The secret of life is seen now to lie not so much in heredity molecules, or in natural selection and the survival of the fittest, or in life's informational, cybernetic learning. The secret of life is that it is a passion play. This is the labor of divinity, and it is misperceived if seen only as selfish genes or red in tooth and claw. The view here is not panglossian; it is a tragic view of life, but one in which tragedy is the shadow of prolific creativity. That is the case, and the biological sciences with their evolutionary history can be brought to support this view, although neither tragedy nor creativity is part of their ordinary vocabulary.¹⁴⁸

In order for life to flourish, death must occur; this is a central principle of natural selection. Yet even if this alternative interpretation is adopted, it still presents a challenge to the Augustinian theodicy as it negates the need for suffering to be explained. If suffering is merely a hermeneutical understanding indicative of a cultural context, then this negates the need for a theodicy; Augustine's doctrine of original sin becomes redundant. In either case then, whether evolution is a raging battle royal or a creative tragedy, it erodes the dominant understanding of good and evil with its asymmetrical focus on an established good repealed because of human sin.

1.6.3 Anthropocentrism

The predominant conception of good and evil can also be characterised by its focus on humanity. In Augustine's view, through our initial sin, humanity is essentially the culprit behind suffering in the world; the paradisiacal creation went awry because of our actions. Other appreciations of good and evil also share this idiosyncrasy; the free will defence advocated by Alvin Plantinga, for instance, cites creatures' freedom to act good or evil as an explanation for evil. Plantinga even stresses that this free will defence can be extended to

¹⁴⁸ Holmes Rolston III, 'Caring for Nature: From Fact to Value, From Respect to Reverence', *Zygon: Journal of Religion and Science*, 39.2 (2004) pp. 292-293

incorporate natural evil, given the free will of Satan or demons – as discussed in section 1.3.¹⁴⁹ The ‘best of all possible worlds’ theodicy of Leibniz is less explicitly vulnerable to this criticism, as is the more nuanced version of it promoted by Aquinas.¹⁵⁰ However, when dealing with the question of whether this is or is not the best of all possible worlds, one could contentiously raise the question, ‘best for whom?’ The grand narrative of evolution continually indicates that human beings are seemingly insignificant late-comers in the unfolding drama; we are an ephemeral thread sown into a boundless tapestry. Therefore, it becomes dubious to propose that this is the best of all possible worlds, if we are understanding it in terms of what is best for us; ‘best’ is again characterised in purely human terms.

In this view, the entire problem of evil could be rendered unintelligible; pain and suffering and their requirement to be explained are only understood in humanity’s seemingly insignificant sphere. Christopher Southgate writes on this matter, though he disagrees with the premise.¹⁵¹ He argues that there is a genuine need for a theodicy, and moreover, that previous understandings of good and evil, such as those explored in this chapter, have been too anthropocentric to be reconciled with evolutionary theory.¹⁵² He acknowledges that traditional theodicies are too anthropocentric, but he does not suggest that this important point makes the problem of evil obsolete. It could conversely be maintained, that some degree of anthropocentrism is warranted based on the fact that humans do exhibit certain characteristics which distinguish us from the rest of the animal kingdom. Such sentiment is apparent in theologians such as Rahner, who writes that it is “through men above all that we must look at in order to learn what the Creator-creature relationship is.”¹⁵³ Our social and

¹⁴⁹ Alvin Plantinga, *God, Freedom, and Evil*, p. 58

¹⁵⁰ Thomas Aquinas, *Summa Theologica: I*, 19.3

¹⁵¹ Christopher Southgate, ‘God and Evolutionary Evil: Theodicy in Light of Darwin’, *Zygon: Journal of Religion and Science*, 37.4 (2002) p. 809

¹⁵² *Ibid.*, p. 821

¹⁵³ Karl Rahner, *Theological Investigations: I*, trans. Cornelius Ernst, (London: Darton, Longman and Todd, 1965) p. 164 [Originally published 1954]

cultural behaviour is far more intricate and advanced than any other living organism, a fact that even stalwart evolutionists like Richard Dawkins will acknowledge.¹⁵⁴ Thus there emerges a necessary dialectic on this issue which could not be resolved here, but will be a perennial question posed by theology and science alike; are humans special? What can be firmly asserted, however, is that evolution brings with it new perspectives on the problem of evil.

1.7 Conclusion

To conclude, five distinct points pertaining to the traditional theological understanding of good and evil can be discerned. Firstly, as articulated in section 1.2, our conceptions of ethics have generally had a theo-centric character; goodness was always attributed to God. Divine laws stipulated what was considered right and wrong. Even pre-evolutionary secular ethics can be seen to be consistent with some form of overarching laws. Moreover, the theo-centric appreciation of the origin of goodness was hardly challenged at all; the question of evolutionary ethics, where does goodness come from, was not asked. Secondly, it was explained in section 1.3 how the converse question became one of the most dominant perplexities in theological history; whence comes evil? Rather than searching to ascertain where goodness comes from, theology and philosophy had a general preoccupation with the origins of evil. Consequently, we see an overarching theological conception which maintained an asymmetry; a primordial goodness and a conspicuous evil. This vision led to a myriad of arguments pertaining to evil, from attempts to justify God (in the case of Leibniz, Hegel and others), to attempts to refute God's existence (in the case of Bertrand Russell and J.L Mackie). More significantly in this context, it gave rise to the most dominant

¹⁵⁴ Richard Dawkins, *The Selfish Gene*, 30th Anniversary ed., (Oxford: Oxford University Press, 2006) p. 189 [Originally published 1976]

model that has been used to understand good and evil; the Augustinian framework of original sin and the fall.

The third and fourth discernable points were two elements of theological understandings of good and evil, explicated in section 1.4; the notions of a fallen human state or natural inclination towards evil and sin, and the focus on punishment. The belief that humanity is fundamentally flawed or destined to sin could be considered a pessimistic outlook. It may, as was asserted above, have arisen in part from the cultural context of Augustine which promoted obsequiousness to authoritarian ruling regimes, and was certainly influenced by his exegesis of Genesis. However, it was also discussed how attempts have been made in twentieth century theology particularly, to bring the theme of Christian salvation to the forefront and mitigate the more pessimistic motifs of original sin – yet, this still adheres to the U-profile of the biblical narrative and the asymmetry of a pre-existent goodness to be restored. The vision of suffering as a punishment for humanity's sinful nature could also be understood as pessimistic, as it leads one to understand moral actions as a result of fear rather than genuine motives. This point was discussed with relation to Kant's ideas on motives and Nygren's classifications of *agape* and *eros*. Loving actions done out of fear of punishment may be equated to *eros*; they are actions stemming from self-interest, as opposed to genuine Christian love or *agape*. This distinction will become a significant theme in the next chapter which will engage with both Christian ethics and evolutionary ethics itself. The influence of these themes in philosophy and theology was then explored in section 1.5, to demonstrate how instrumental the traditional or Augustinian vision as understood here has been.

The fifth discernable point which concluded this chapter and established the background for this thesis was the inconsistencies between the traditional understandings of good and evil and evolutionary theory. Whilst there have been significant efforts made to

persist with some or all of the themes of original sin, it has been widely acknowledged (by theologians such as Alister McGrath, Christopher Southgate, Holmes Rolston and others) that evolutionary theory does indeed bring new dimensions to bear with regard to how we are to understand suffering in the natural world. Particularly important in this context is how evolutionary theory presents perhaps insurmountable difficulties for the vision of a paradise lost, which scaffolds the traditional understanding of good and evil. As such, it is necessary that theology engages more fully with a framework for understanding good and evil in terms of evolution. Consequently, this thesis will engage with such a framework and present a particular reading of evolutionary ethics which does not necessarily supersede previous thinking on Christian ethics, but provides a new dimension which is accommodative of current theory in science and theology. In achieving this task, the next chapter will examine the compatibility of Christian ethics and evolutionary ethics as I understand them, in contributing to a synthesis between theological and evolutionary approaches to provide an overarching ethical framework, one which I will ultimately argue is hopeful and optimistic.

CHAPTER TWO:

THE COMPATIBILITY OF CHRISTIAN ETHICS AND EVOLUTIONARY ETHICS

2.0 Introduction

It was demonstrated in the previous chapter that the ‘traditional’ theological framework for understanding good and evil, and hence, ethics, is challenged in a number of ways by evolutionary theory. This chapter will now make a turn towards a more specific comparison between Christian ethics and an evolutionary framework for understanding ethics. Ultimately, it will be argued here that Christian ethics and evolutionary ethics can co-exist. However, immediately a caveat surfaces, as a clear understanding of what both ‘Christian ethics’ and ‘evolutionary ethics’ entail in this context needs to be chosen and argued for. Wide-ranging and often conflicting ethical stances have been adopted by different churches which identify themselves as ‘Christian’, for example just-war theories and pacifism, which seem to conflict. Therefore, it is necessary to articulate what I take to be ‘Christian ethics’ in this context. In this regard, it is outlined in section 2.1 that in this thesis, Christian ethics has three distinct characteristics; moral freedom, *agape* and neighbourly love, and natural law. Of course it is not contested that these three characteristics are all-encompassing, exhaustively definitional attributes of Christian ethics in any context, nor are they exclusive to Christianity. Indeed a Christian ethicist may very well challenge either the importance or particular meaning I attribute to these tenets of Christian ethics.

Yet these characteristics, and a particular understanding of them, have been chosen to provide a functional definition of Christian ethics in order to address a comparison with evolutionary understandings of ethics. That being said, this threefold representation of Christian ethics is not arbitrary but drawn from important theological traditions: moral

freedom I take in part from theologians of the early Church such as Augustine and Pelagius, and in part from philosophy; *agape* and neighbourly love I take in part from reflections on the Gospels, and in part from liberation theologies; and natural law I take in part from Aquinas, and in part from subsequent reflections upon Aquinas.

Having established what is implied by ‘Christian ethics’ then, in order to compare this with evolutionary ethics, a particular reading of what is understood by ‘evolutionary ethics’ must also be outlined. This will be addressed in section 2.2. Evolutionary ethics will be understood as the attempt to explain from an evolutionary perspective the origin and nature of ethics/moral behaviour. This task has been an important element of the field known as sociobiology – though sociobiology is not solely concerned with morality but with all social behaviour, and not just with humans but with insects and other animals also. Of specific concern in this context is human morality, how it evolved, and whether or not such an evolutionary understanding of human morality conflicts with a Christian understanding of morality.

It must be acknowledged at this point that the field of sociobiology can be problematic. Sociobiology or evolutionary ethics as I understand it, assumes in the first instance that our genetics play an important role in our behaviour. Yet the question remains over exactly how influential our genetics can be. This is pointed out by philosopher Philip Kitcher, who acknowledges the uncontroversial claim that our behaviour is influenced somewhat by our genetics, though questions how proximate such causes are.¹⁵⁵ He also questions the appropriateness of attempting to understand human behaviour directly in terms of evolutionary benefit, whether such explanations overlook the importance of social practice, and indeed what contribution such studies can make to a grand analysis of human

¹⁵⁵ Philip Kitcher, *Vaulting Ambition: Sociobiology and the Quest for Human Nature*, (Massachusetts: MIT Press, 1985) p. 282

social behaviour.¹⁵⁶ Notwithstanding, as philosopher of biology Michael Ruse explains, although intensive investigation is still ongoing, “the evidence is strong that the genes, as promoted by natural selection, do have a significant causal input into human social behaviour, and consequently, into culture.”¹⁵⁷

Further critiques of sociobiology have been posed by philosophers such as Bart Voorzanger who suggests that sociobiology can be highly speculative and prejudiced; sociobiology is influenced by socio-political motivations and merely presented in a scientific way.¹⁵⁸ Sociobiology can be seen as emerging from a context or paradigm with socio-political motivations thus limiting the neutrality of its conclusions – a critique reminiscent of Thomas Kuhn’s depiction of science *en masse*.¹⁵⁹ Whilst these cautionary critiques are acknowledged, I follow Ruse in asserting that sociobiology or indeed its parent Darwinian theory, is not always value-laden to the point where its core themes are not substantive; the fact that scientific or philosophical theories may be value-laden does not discount their legitimacy.¹⁶⁰ Despite potential socio-political motivations, sociobiology can be considered to bring important insights into human nature and human morality. Evolutionary ethics as I understand it – that is, an understanding of ethics from an evolutionary perspective rather than ethical discourse informed by evolution – will therefore be outlined in section 2.2.

Attention will then be given to a comparison of the two systems – though such a comparison is not necessarily balanced. It is acknowledged that the overarching asymmetrical metaethic of a primordial good and conspicuous evil explored in the previous chapter must be reconsidered in light of evolutionary theory. Such a reconceived metaethic will be sketched in the following chapters, though presently, it will be considered how

¹⁵⁶ Ibid., pp. 283-284

¹⁵⁷ Michael Ruse, *The Darwinian Paradigm: Essays on its History, Philosophy and Religious Implications*, (London: Routledge, 1999) p. 253

¹⁵⁸ Bart Voorzanger, ‘No Norms and No Nature – The Moral Relevance of Evolutionary Biology’, *Biology and Philosophy*, 2.3 (1987) p. 265

¹⁵⁹ Thomas Kuhn, *The Structure of Scientific Revolutions*, (Chicago: University of Chicago Press, 1996) p. 210 [Originally published 1962]

¹⁶⁰ Michael Ruse, *Evolutionary Naturalism: Selected Essays*, (London: Routledge, 1995) p. 257

evolutionary ethics may be perceived to conflict with the three tenets of my understanding of Christian ethics. Particular aspects of evolutionary ethics may be seen to impinge on human freedom, *agape* and neighbourly love, and natural law, and these perceived conflicts will be articulated in sections 2.3-2.5 respectively. However, I will argue that these conflicts only arise as a result of certain misunderstandings of evolutionary ethics; once issues such as the role of human consciousness and emergence are taken into account, then apparent contradictions between Christian ethics and evolutionary ethics can be understood to be erroneous. Once these conflicts have been overcome, it can then be stressed that the two systems can co-exist. Establishing the potential co-existence of these two systems is the goal of this chapter, which will make headway towards the central argument of this thesis; that evolutionary ethics can contribute to a theological or Christian worldview and provide hope in a seemingly nihilistic world.

2.1 An Understanding of Christian Ethics

In this chapter, it will be argued that evolutionary understandings of ethics are not inimical to Christian ethics. 'Christian ethics', however, is an extremely broad term; it could even be argued that there is no single 'Christian ethics'. For example, various religious denominations which identify themselves as Christian not only approach particular moral issues differently, e.g. homosexuality, but also derive their 'Christian ethics' from different sources, e.g. scripture, magisterium or various amalgamations of different sources. Moreover, as I have argued elsewhere, even within particular Christian traditions such as Catholicism, there often exists diverse approaches to moral issues such as homosexuality, celibacy, divorce, etc.¹⁶¹ Therefore, in order to demonstrate how evolutionary understandings of ethics are compatible with, or at least not intrinsically disagreeable to

¹⁶¹ See Gary Keogh, 'Dissent and The Communion of the Church', *Doctrine and Life*, 63.1 (2013)

Christian ethics, it needs to be clearly stated what is meant by ‘Christian ethics’ in this current context. In approaching the question then, of the potential compatibility of evolutionary ethics and Christian ethics, three distinct aspects of Christian ethics will be considered; i) moral freedom, ii) *agape* and neighbourly love, and iii) natural law. Perceived conflicts between the two systems can be discerned with respect to these three aspects of Christian ethics – though ultimately, it is contested that these conflicts have weak foundations upon a closer analysis of evolutionary understandings of ethics. Furthermore, ambiguity also pervades each of these three themes and they could each be interpreted in a variety of ways. Therefore, each of the three themes must be further explained in terms of what they are taken to mean in this context.

2.1.1 Moral Freedom

The concept of free will can be understood as equivocal, evident in its multifarious interpretations in philosophical thinking; Descartes for example, considered that *liberum arbitrium* or the ability to choose was so free that it could never be constrained, whilst Thomas Hobbes was less enthused about free will, noting that while actions are voluntary, unimpeded liberty would contradict the liberty and omnipotence of God.¹⁶² Moreover, difficulties emerge in positing free will as a consideration for moral actions given that there is no *a priori* reason to assume that freedom can be clearly demarcated from non-freedom; a view of moral freedom will be defended in Chapter Five, which considers freedom as a matter of degree rather than an extrinsic quality in itself; actions may be considered more free or less free, not necessarily free or not free. Free will is thus difficult to consider categorically.

¹⁶² René Descartes, *The Passions of the Soul*, trans. Stephen H. Voss, (Indianapolis: Hackett, 1989) p. 49 [Originally published 1649]; see also, Thomas Hobbes, *Leviathan*, Richard Tuck ed., (Cambridge: Cambridge University Press, 1996) p. 147 [Originally published 1651]

Within Christian theology itself, varying positions with regard to free will also exist, for example the debate between Augustine and Pelagius on the issue of whether humans were completely free (Pelagius) or without grace unable to will the good (Augustine).¹⁶³ In addition, as the American theologian Eleonore Stump explains, “Historians of philosophy read Augustine on free will so variously that it is sometimes difficult to believe they are reading the same texts.”¹⁶⁴ Stump explores various scholarly attempts to formulate definitions of Augustine’s position on free will, none of which can be considered either exclusive or exhaustive.

Notwithstanding, as stated in section 1.4.1, moral freedom is an important element of theological appreciations of ethics. Whatever ambiguities exist pertaining to the issue of freedom, it is essential that actions be free in some sense in order for them to have moral worth. This is not to suggest that determinism mitigates freedom, or question whether a mitigated freedom subsequently mitigates the moral worth of actions – one could for example, acknowledge determinism yet still morally judge actions based on particular determining factors. Philosopher Harry Frankfurt considers such a view – that actions can be judged based on determining factors (he distinguishes between actions based on first or second order desires).¹⁶⁵ Yet even on this view, he acknowledges a mode of freedom attributed to humans premised on our ability to form second order desires and have a choice between first and second order desires.¹⁶⁶ Therefore, it can be stated that in order for moral actions which are morally consequential – that they result in either good or evil – to be distinguished from amoral but morally consequential actions, e.g. the moving of tectonic plates causing evil, a form of freedom must be present, however one understands such freedom – again, a particular understanding of freedom will be defended in Chapter Five.

¹⁶³ Alister McGrath, *Christian Theology*, pp. 443-444

¹⁶⁴ Eleonore Stump, ‘Augustine on Free Will’, Eleonore Stump and Norman Kretzmann eds., *The Cambridge Companion to Augustine*, p. 124

¹⁶⁵ Harry Frankfurt, ‘Freedom of the Will and Concept of A Person’, *Journal of Philosophy*, 68.1 (1971) p. 6

¹⁶⁶ *Ibid.*, p. 7

Consequently, despite the difficulties in considering free will, we can proceed under the assumption that some form free will does exist and that humans are responsible moral beings. This freedom is enough to allow for intelligible moral discourse. Moral freedom is a prerequisite for there to be any distinction between good and evil; at the risk of oversimplifying, if freedom did not exist, then actions could not be considered morally good or morally evil; they would be amoral, as no alternative would be possible. Alvin Plantinga explicates this premise in the following passage:

A world containing creatures who are significantly free (and freely perform more good than evil actions) is more valuable, all else being equal, than a world containing no free creatures at all. Now God can create free creatures, but He can't cause or determine them to do only what is right. For if He does so, then they aren't significantly free after all; they do not do what is right freely. To create creatures capable of moral good, therefore, He must create creatures capable of moral evil.¹⁶⁷

Moral freedom, then, is taken here as an example of a cardinal characteristic of Christian ethics. It is an example of an aspect of an ethical view (though one not specifically Christian or theological) which could be perceived as a source of conflict between evolutionary ethics and Christian ethics.

2.1.2 Agape and Neighbourly Love

The second characteristic of Christian ethics as it is understood in this chapter is the notions of *agape* and neighbourly love. Like the issue of free will, Christian neighbourly love is a concept which has been filtered through diverse hermeneutical funnels, often diluted and applied selectively in various situations. Jesus' great commandment "love your neighbour as yourself" (Matt.22:39) is not unique or original; it echoes Leviticus (19.18), "You shall not take vengeance or bear a grudge against any of your people, but you shall love your

¹⁶⁷ Alvin Plantinga, *God Freedom and Evil*, p. 30

neighbour as yourself” as well various other philosophies and religions. Anders Nygren rightfully illustrates that considering love as a central tenet of Christianity is an obvious fact, but of course, the term has been variously understood.¹⁶⁸ Therefore, he posits *agape* as an appropriate understanding of Christian love, “What is the good? The good is ἀγάπη, and the ethical demand finds summary expression in the Commandment of Love, the commandment to love God and my neighbour.”¹⁶⁹

Nygren considers *agape* as the distinguishing feature of Christian ethics, “It sets a mark on everything in Christianity. Without it nothing that is Christian would be Christian. *Agape* is Christianity’s own original basic conception.”¹⁷⁰ As mentioned in Chapter One, *agape* can be understood as an altruistic, unconditional love, as opposed to *eros*, variously defined as physical love or ultimately self-gratifying love stemming from yearning desire.¹⁷¹ As the religious scholar Colin Grant explains, in the Hellenistic world, *eros* was used to designate the Greeks’ aspiration or desire, “It could cover sexual desire and thirst for the divine.”¹⁷² Of course, such definitions are not absolute; they are functional in aiding Nygren’s task of distinguishing Christian love. According to Grant, a strong case can be made against Nygren in this regard.¹⁷³ Benedict XVI was already cited in the previous chapter, as suggesting that too sharp a distinction had been drawn between *agape* and *eros*. Similar perspectives are found with Paul Tillich, who felt that *agape* and *eros* were inseparable.¹⁷⁴ Grant suggests then that the altruism of *agape* (if the two terms are roughly equated) does not stand inherently opposed to self-interest, “*eros* may enrich, rather than threaten, *agape*....”¹⁷⁵

¹⁶⁸ Anders Nygren, *Agape and Eros*, p. 41

¹⁶⁹ Ibid., p. 48

¹⁷⁰ Ibid., p. 48

¹⁷¹ Philip S. Watson, ‘Translator’s Preface’, Ibid., p. viii

¹⁷² Colin Grant, *Altruism and Christian Ethics*, (Cambridge: Cambridge University Press, 2001) p. 168

¹⁷³ Ibid., p. 175

¹⁷⁴ Paul Tillich *Systematic Theology: II.3*, (London: SCM, 1978) p. 129 [Originally published 1957]

¹⁷⁵ Colin Grant, *Altruism and Christian Ethics*, p. 172

Notwithstanding, in the context of comparing Christian ethics with evolutionary ethics, Nygren's classification of Christian love as altruistic *agape* provides a good starting point for a normative position understood in this context as a fundamental tenet of Christian ethics. As Nygren states, "We have... every right to say that *ἀγάπη* is the centre of Christianity, the Christian fundamental motif *par excellence*, the answer to both the religious and ethical question."¹⁷⁶ Consequently, altruism can be identified as a key feature of Christian ethics. This sentiment is also found in the work of theologians such as Philip Clayton, who signifies altruism as the "crucial question for religious ethics."¹⁷⁷ Jeffery Schloss expresses a similarly robust position, as he states that sacrificial love or altruism is, in the Christian tradition, the ultimate *telos* of human existence, "the summation and fulfilment of all moral obligation."¹⁷⁸ Although *agape* will be considered as the *telos* of human morality in Chapter Five, Schloss' statement here could be perceived as overly grandiose as it pertains to the broader issue of human existence, as British theologian Neil Messer points out, "Strictly speaking, in the Christian tradition, the *telos* of human existence is more commonly reckoned to be eternal life with God...."¹⁷⁹ There is nothing expressly theological in viewing altruism as the *summum bonum* of Christian life; indeed Auguste Comte's atheistic positivism held altruism (a term Comte himself coined) as the definitive formula of human morality.¹⁸⁰ However, in the context of this chapter, altruism or *agape* can be signified as at least a key feature of Christian ethics – though this is not to say that the notion of *agape* implies Christianity.

¹⁷⁶ Anders Nygren, *Agape and Eros*, p. 48

¹⁷⁷ Philip Clayton, 'Biology and Purpose', Philip Clayton and Jeffery Schloss eds., *Evolution and Ethics: Human Morality in Biological and Religious Perspectives*, (Michigan: Erdmans, 2004) p. 333

¹⁷⁸ Jeffery Schloss, 'Evolutionary Ethics and Christian Morality', Philip Clayton and Jeffery Schloss eds., *Evolution and Ethics: Human Morality in Biological and Religious Perspectives*, p. 10

¹⁷⁹ Neil Messer, *Selfish Genes and Christian Ethics: Theological and Ethical Reflections on Evolutionary Biology*, (London: SCM, 2007) p. 127

¹⁸⁰ August Comte, *The Catechism of Positive Religion*, (Cambridge: Cambridge University Press, 2009) [Originally published 1891] p. 217

A related question arises with this understanding of altruism as a key feature of Christian ethics; if selfless love is the fulfilment of moral obligation, it could be asked, selfless love towards who? This was the question posed to Christ by an expert in law in Luke (10.29). Within various Christian denominations, for example Roman Catholicism, dissatisfaction has been expressed due to perceived conditional representations of ‘love for thy neighbour’; conditions, for example, based on the gender or sexual orientation of ‘thy neighbour’.¹⁸¹ There have been various understandings or representations of who ‘thy neighbour’ is. Messer instructively points to aspects of Karl Barth’s approach, which he feels are relevant on this question.¹⁸² Barth suggests that the Christian challenge is to expand the circle of loyalties and concerns; that there is no distinction between near and distant neighbours – a sentiment developed in the Good Samaritan parable (‘near’ and ‘distant’ taken not just spatially but also with respect to identity).¹⁸³ The interpretation of Christian ethics followed here, then, is an unconstrained *agape* towards others, irrespective of who the ‘others’ are; a love even towards one’s enemies (Matt. 5:44) – though for the sake of focus, whether or not animals be considered morally relevant others will be an ethical question left for future research. What is of concern here is developing an overarching framework and not a discussion on the intricacies of ethical dilemmas present within such a framework.

Whilst this facet of Christian thought can be held as the ‘fundamental motif’ of Christian morality as Nygren suggested, this is not to say that it is immune to critique. Nietzsche, for example, expresses clear disdain for such ethics, “Christianity has been the most disastrous form of arrogance... with their “equality before God”....” T.H. Huxley, a contemporary and colleague of Darwin, also provides an interestingly critical view on the Christian ‘golden rule’ of neighbourly love. Huxley considers the logical conclusions of the

¹⁸¹ See Gary Keogh, ‘How can the Church Survive? Reflections of a Celtic Tiger Cub’, *The Furrow*, 62.4 (2011); also, Gary Keogh, ‘An Irish Church Reform Movement’, *The Furrow*, 63.7/8 (2012)

¹⁸² Neil Messer, *Selfish Genes and Christian Ethics*, p. 125

¹⁸³ Karl Barth, *Church Dogmatics: III.4*, trans. A.T. Mackay et al, G.W. Bromley and T.F. Torrance eds., (Edinburgh:T&T Clarke, 1990) pp. 285-323 [Originally published 1951]

empathetic notion of ‘do as you would be done by’ and suggests that they would be “incompatible with the existence of a civil state, under any circumstances of this world which have obtained, or, so far as one can see, are likely to come to pass.”¹⁸⁴ Huxley points out that a strict understanding of Jesus’ altruistic neighbourly love can ultimately defeat itself in the following example:

For I imagine there can be no doubt that the great desire of every wrongdoer is to escape from the painful consequences of his actions. If I put myself in the place of the man who has robbed me, I find that I am possessed by an exceeding desire not to be fined or imprisoned; if in that of the man who has smitten me on one cheek, I contemplate with satisfaction the absence of any worse result than the turning of the other cheek for like treatment. Strictly observed, the “golden rule” involves the negation of law by the refusal to put it in motion against law-breakers; and, as regards the external relations of a polity, it is the refusal to continue the struggle for existence.¹⁸⁵

Although Christian altruistic neighbourly love is understood in the context of this thesis as a fundamental characteristic of Christian ethics which will be compared with evolutionary ethics, it should be acknowledged that it may be vulnerable to certain criticisms.

A further point on the Christian idea of neighbourly love pertains again to the questioning of who is the ‘neighbour’. Although the ‘neighbour’ in ‘neighbourly love’ is taken to be unconditional in the understanding of Christian ethics presented above, there is also a focus on certain ‘neighbours’ evident in particular representations of Christian ethics; the oppressed. For example, liberation theologians such as Gustavo Gutiérrez argued that theology should be focused on solidarity with the oppressed classes.¹⁸⁶ Despite certain criticisms of liberation theology,¹⁸⁷ the idea of a preferential option for the poor was adopted

¹⁸⁴ Thomas Henry Huxley, *Evolution and Ethics and Other Essays*, (New York: D. Appleton and Company, 1896) p. 57

¹⁸⁵ *Ibid.*, p. 57

¹⁸⁶ Gustavo Gutiérrez, *A Theology of Liberation: History, Politics and Salvation*, trans. and eds. Sr Caridad Inda and John Eagleson, (London: SCM, 1983) p. 308 [Originally published 1971]

¹⁸⁷ For example, Joseph Ratzinger, ‘Instruction on Certain Aspects of the ‘Theology of Liberation’’, (Rome 1984) http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19840806_theology-liberation_en.html accessed 15th Nov. 2013

by influential figures such as John Paul II.¹⁸⁸ Therefore, in this chapter, it will be considered that a preferential option for the poor is a further characteristic of Christian ethics. Christian ethics focuses on, as the theologian Albert Nolan explains, “the poor, the blind, the lame, the crippled, the lepers, the hungry, the miserable (those who weep), sinners, prostitutes, tax collectors, demoniacs (those possessed by unclean spirits), the persecuted, the downtrodden, the captives... the least, the last... the lost sheep of Israel.”¹⁸⁹ Christian ethics, as understood here in terms of *agape* and neighbourly love, is concerned specifically – though not only – with the poor and the oppressed (being mindful that these are equivocal terms and are not necessarily concerned with material poverty or political oppression). This theme is also discussed in wider-than-Christian contexts, such as in the work of John Rawls, who felt that a just society should strive to provide benefits in particular for the least advantaged members of society.¹⁹⁰

2.1.3 Natural Law

A further characteristic of Christian ethics as it is understood in this chapter, is natural law theory. The British theologian Gerard J. Hughes offers a definition of natural law in its broadest sense, as the view that “morality derives from the nature of human beings.”¹⁹¹ However, as Hughes points out, such a broad understanding may dilute the true nuance and controversy within theories of natural law.¹⁹² Aquinas is understood to have built his representation of natural law on various aspects of Aristotelian philosophy such as teleology

¹⁸⁸ John Paul II, *Centesimus Annus*, (Rome: 1991)
http://www.vatican.va/holy_father/john_paul_ii/encyclicals/documents/hf_jp-ii_enc_01051991_centesimus-annus_en.html accessed 12th Oct. 2012

¹⁸⁹ Albert Nolan, *Jesus Before Christianity*, (London: Darton, Longman and Todd, 1992) p. 27 [Originally published 1977]

¹⁹⁰ John Rawls, *A Theory of Justice*, (Massachusetts: Harvard University Press, 1999) p. 13 [Originally published 1971]

¹⁹¹ Gerard J. Hughes, ‘Natural Law’, Bernard Hoose ed., *Christian Ethics: An Introduction*, (London: Continuum, 1998) p. 47

¹⁹² *Ibid.*, p. 47

– though this is not to say that the two thinkers have identical positions on morality.¹⁹³

Aristotle did discuss the question of the good in markedly teleological terms; there are particular ends in different actions and arts, “Therefore, if there is an end for all that we do, this will be the good achievable by action...”¹⁹⁴ Aquinas understood moral ends in a comparably teleological way, though went a step further in identifying the ends as God’s eternal law, “all things partake somewhat of the eternal law, insofar as, namely, from its being imprinted upon them, they derive their respective inclinations to their proper acts and ends.”¹⁹⁵ Aquinas and Aristotle then, are comparable in terms of speaking of ends, though for Aquinas, the inclination is/should be to pursue the eternal law, whereas Aristotle believed in a diversity of ends.

Aquinas’ thought on natural law and ends is complex, governed by various precepts which have been interpreted in a variety of ways, making it difficult to take as a singularly definable aspect of Christian ethics. His often quoted general principle of natural law, that “good is to be done and pursued, and evil avoided”¹⁹⁶ for example, demands further explanation; what is the good? How do we know the good? What about the perceived subjectivity of the good in various situations? These questions highlight the difficulty in considering natural law as a stand-alone doctrine. Notwithstanding, Aquinas does acknowledge the role of human reason in aiding our exploration and hopeful discovery of the eternal right and wrong; it can be a guide through this moral ambiguity. Therefore, a functional understanding of natural law is employed in this chapter; I take natural law as a distinguishing characteristic of Christian ethics for the purposes of comparing Christian ethics with evolutionary ethics, natural law being understood as the idea that morality stems from an interplay between human reason and an innate morality in nature. Human reason

¹⁹³ Ibid., p. 53

¹⁹⁴ Aristotle, *Nicomachean Ethics*, p. 941

¹⁹⁵ Thomas Aquinas, *Summa Theologica: I-II*, 91.2

¹⁹⁶ Ibid., 94.2

uncovers a moral code evident in nature.¹⁹⁷ Contrary to Bertrand Russell's idea of omnipotent matter, blind to good and evil, Aquinas postulated that nature has inherent in it, the ingredients of a moral code.¹⁹⁸ In Aquinas' view, this natural law reflects the values of God.

Indeed, like altruism and neighbourly love, the theological component of natural law, whilst present in Aquinas, is perhaps omissible in a broader discussion on morality. As Hughes explains, basing morality on human nature has been a feature of all classical Western philosophers, from Aristotle to Bentham.¹⁹⁹ However, the possibility of omitting the theological aspect of natural law only serves to strengthen my argument that Christian ethics and evolutionary ethics are not inherently inimical to one another, irrespective of whether Christian ethics requires a theological addendum conceiving a divine, eternal law. It is not contended that evolutionary ethics and Christian ethics will comfortably coalesce without remainder, nor would such a synthesis be expected. A theological component will be central to many Christian understandings of ethics, though in the field of evolutionary theory, such a component will not be of concern. As such, it will not be argued that evolutionary ethics specifically implies a theological element. However, this does not in any way provide an argument that the two understandings of ethics are opposed. Rather, it signifies a difference, but difference is not opposition.

To summarize the understanding of Christian ethics in this context then, I have highlighted three important characteristics; i) moral freedom, ii) *agape* and neighbourly love, and iii) natural law. This is not by any means an exhaustive understanding of what Christian ethics may be taken to mean. For example, it does not indicate a particular stance on any given moral issue or set of moral issues. Moreover, even within each of these motifs,

¹⁹⁷ Gerard J. Hughes, 'Natural Law', p. 48

¹⁹⁸ Bertrand Russell, 'A Free Man's Worship', Robert E. Egner and Lester E. Denonn eds., *The Basic Writings of Bertrand Russell*, (London: Routledge, 2009) p. 44 [Originally published 1961]

¹⁹⁹ *Ibid.*, p. 47

variety exists. Therefore, it has been stated above what is understood by each of these characteristics. These particular characteristics have been used here because they are firstly, cardinal features of Christian ethics, and secondly, because it is with regard to these three issues that perceived conflicts between Christian ethics and evolutionary ethics lie. It is the task of this chapter to demonstrate that on these three central tenets of Christian ethics, there is little or no conflict between the two systems under investigation. In fact, several interesting parallels may even be drawn.

2.2 An Understanding of Evolutionary Ethics

Evolutionary ethics, like Christian ethics, is a term which is open to a variety of interpretations. Therefore, it should be made clear what it is taken to mean or imply in the current context. In this thesis, I take evolutionary ethics to mean an approach to ethics primarily concerned with how ethics evolved through natural selection. It is taken from various attempts to reconcile the principle of competition which drives natural selection (though this principle and its influence can itself be disputed) with the salient manifestations of altruism in the natural world.²⁰⁰ In this sense, I equate evolutionary ethics to the sociobiological perspective on ethics. The central problem of sociobiology is stated by Edward O. Wilson, arguably the founder of the field, as; “How can altruism, which by definition reduces personal fitness, possibly evolve by natural selection?”²⁰¹ In other words, the understanding of evolutionary ethics is predominantly concerned with the scientific/philosophical question of ethics’ origin. More specifically, I am concerned with human ethics, whereas the field of sociobiology is broader, though in dealing with human

²⁰⁰ For examples of interpretations of evolution that dispute the emphasis on struggle or competition, see Peter Kropotkin, *Mutual Aid: A Factor in Evolution*, (New York: Dover, 2006) p. 1 [Originally published 1902]; also, Stephen Jay Gould, *Ever Since Darwin*, p. 88; and to an extent, Charles Darwin, *Autobiographies*, Michael Neve and Sharon Messenger eds., (London: Penguin, 2002) p. 51 [Originally published 1903]

²⁰¹ Edward O. Wilson, *Sociobiology: The New Synthesis*, (Massachusetts: Belknap Press, 1975) p. 3

ethics we are forced to consider our evolutionary lineage which is of course wider than humanity.

Others such as legal philosopher Jeffrie Murphy have suggested that evolutionary ethics or sociobiology could offer a parallel or alternative to ethical systems such as utilitarian ethics, deontological ethics, consequentialism, and so on.²⁰² Evolutionary theory can offer certain insights into developing ethical codes; Peter Singer, for example, contends that our understandings of evolutionary theory challenges us to review our moral approach to apes and other animals.²⁰³ However, in this current context, I am concerned with the system for understanding the origin and nature of ethics from the perspective of evolutionary theory and its emphasis on struggle and competition (it has already been duly noted that this emphasis has been challenged, though I follow Gould in suggesting that such criticisms do not discount the intrinsic role of struggle in evolution).²⁰⁴

As discussed in Chapter One, 'traditional' frameworks for understanding ethics were marked by the presupposition of a world created good, evident for example in Plato and the Judeo-Christian narrative. Goodness was understood as established instantaneously (or thereabouts) and instilled in an archaic covenant or social contract. However, Darwin's depiction of humanity as an aspect of gradual evolution seems to conflict with the idea of an early or first society which established a moral code, as in the social contract myths of Rousseau and others. Peter Singer makes this point by acknowledging that archaeological evidence indicates that our pre-*Homo sapien* ancestors and their relatives, such as *Australopithecus africanus* and *Homo Habilis* were social beings. Therefore, the concept of a set of rules emerging from a distant Foundation Day where the first rational humans became social beings seems implausible.²⁰⁵ Consequently, modern social contract theorists

²⁰² Jeffrie Murphy, *Evolution, Morality and the Meaning of Life*, (New Jersey: Rowman and Littlefield, 1982) p. 23

²⁰³ See Peter Singer, *Animal Liberation*, (London: Random House, 1995) [Originally published 1975]

²⁰⁴ Stephen Jay Gould, 'Kropotkin was no Crackpot', *Natural History*, 97.7 (1988) pp. 12-17

²⁰⁵ Peter Singer, *The Expanding Circle*, pp. 3-4

such as Rawls have since stressed that the original state of nature is a hypothetical situation used only to conceive principles of justice; it is not a historical point.²⁰⁶ From an evolutionary perspective, there was no original, primordial state where humanity began; there was a long period of incremental progression. The traditional, theo-centric moral systems based on archaic covenants cease to be sufficient when evolution is taken into account, leaving a void in our understanding of where ethics came from. Evolutionary ethics, in the context of this thesis, is taken as a framework which has been posed as a solution to the question of the origins of ethics. It should be noted however, that when speaking of evolutionary ethics as a framework, I am envisioning an overarching scheme, similar to that presented in Chapter One, though of course, ‘evolutionary ethics’ may encompass not just one approach but several – as we shall see below, there are significant differences in the weight attributed to particular aspects of evolutionary ethics within the field (for example Dawkins and Wilson’s dispute on the role of group selection).

2.2.1 The Question of Altruism in an Evolutionary Context

Examining altruism in an evolutionary context requires a shift in thinking when compared with the theological understanding of ethics that is more concerned with explaining evil than good. A central tenet of evolution stresses competition, as Darwin wrote “... natural selection acts solely by and for the good of each.”²⁰⁷ Permitting an anthropomorphic analogy, one could state along with Darwin that natural selection occurs as if it has the benefit of each as its primary focus – though this is not to portray natural selection as purely individualistic, indeed as we shall see, the ‘each’ is often extended to kin. Therefore, Darwin postulated that it will “never produce in a being anything injurious to itself....”²⁰⁸ Darwin cites the influential nineteenth century theologian William Paley in this regard. Paley

²⁰⁶ John Rawls, *A Theory of Justice*, p. 11

²⁰⁷ Charles Darwin, *The Origin of Species*, p. 154

²⁰⁸ *Ibid.*, p. 154

recognised this particular principle, though postulated divine beneficence as the explanation, “We never discover a train of contrivance to bring about an evil purpose. No anatomist ever discovered a system of organisation, calculated to produce pain and disease....”²⁰⁹

The appearance of design in living organisms is substantiated by the fact that no bodies contain elements that are inherently hostile to themselves.²¹⁰ Darwin was later able to explain why this is the case, “After the lapse in time, under changing conditions of life, if any part comes to be injurious, it will be modified; or if it be not so, the being will become extinct, as myriads have become extinct.”²¹¹ T.H. Huxley expressed that because of these principles, he could not reconcile moral behaviour with the selfishness and moral indifference of nature.²¹² In some respects, this emphasis on competition in Darwinian evolution echoes previous philosophies such as Thomas Hobbes’ “war of every one against every one” where only the strong survive – though again, Darwin’s discussions on kin may indicate his own view as less individualistic.²¹³ It could even be stated that the Darwinian survival of the fittest – a term coined by Herbert Spencer²¹⁴ – lends scientific credence to Augustine’s understanding of original sin; we are naturally inclined to do evil as we are naturally self-interested in order to ensure our survival.

Altruism becomes conspicuous in an evolutionary context then, as it can be disadvantageous to one’s own self. It seems to contradict the basic principles of natural selection. We would not expect evolution to produce altruism. For a similar reason,

²⁰⁹ William Paley, *Natural Theology*, (Oxford: Oxford University Press, 2006) p. 243 [Originally published 1802]

²¹⁰ Strictly speaking, this statement could be challenged given that auto-immune diseases exist. Yet the crux of the issue is that bodies containing elements that are *inherently* hostile do not, *in general*, flourish in the evolutionary process. If entities exist that are hostile to themselves, then they may propagate if such hostility is not such that it prevents itself from breeding. Dawkins notes a similar point with respect to genes which have a negative effect on organisms’ survival competency; they may be perpetuated for several generations if they share a body with genes which play a more positive role. Richard Dawkins, *River Out of Eden: A Darwinian View of Life*, (London: Orion, 1996) p. 3. Such examples are indicative of the tendencies rather than stringency of evolutionary principles, an issue discussed in Elliott Sober, ‘Two Outbreaks of Lawlessness in Recent Philosophy of Biology’, Elliott Sober, ed., *Conceptual Issues in Evolutionary Biology*, 3rd ed. (Cambridge, MA: MIT Press, 2006)

²¹¹ Charles Darwin, *The Origin of Species*, p. 154

²¹² Thomas Henry Huxley, *Evolution and Ethics*, p. 59

²¹³ Thomas Hobbes, *Leviathan*, p. 91

²¹⁴ Herbert Spencer, *The Principles of Biology*, (London: Williams and Norgate, 1864) p. 444

Nietzsche was disapproving of morality, what he termed the “danger of dangers”; he felt it deeply hindered humanity’s attempts to achieve its “highest potential power and splendour.”²¹⁵ Darwin himself recognised this and noted that it hardly seemed probable that natural selection could produce virtuous tendencies such as altruistic behaviour.²¹⁶ Yet altruism clearly exists. As Adam Smith wrote, “How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it.”²¹⁷ Smith speaks of a “man within the breast” who acts as a conscience of sorts.²¹⁸ Kant similarly refers to the apparently innate notion of good will.²¹⁹ Darwin himself refers to this vague compulsion as “the moral sense”, a faculty he views as the most important of all differences between *Homo sapiens* and the lower animals.²²⁰ Therefore, there is a paradox in need of resolution. The asymmetry of the theological assumption of goodness and need to explain evil becomes inverted from the perspective of evolution; it is now goodness that requires explanation.

Although Darwin himself was perplexed by this issue, he pointed out that this question of moral instincts had not, at the time of writing, been approached purely from the perspective of natural history.²²¹ In a similar respect, Nietzsche predicted that this question should in the future be examined in terms of science; the philosopher’s voyage of attempting to understand morality will be first mapped by the scientist.²²² On humanity’s moral sense, Darwin reluctantly differed from “so profound a thinker” as John Stuart Mill, who felt that

²¹⁵ Friedrich Nietzsche, *On The Genealogy of Morality*, trans. Carol Diethe, Keith Ansell Pearson ed., (Cambridge: Cambridge University Press, 2007) p. 8 [Originally published 1887]

²¹⁶ Charles Darwin, *The Descent of Man*, (Washington: Pacific, 2011) p. 85 [Originally published 1871]

²¹⁷ Adam Smith, *The Theory of Moral Sentiments*, D.D. Raphael and A.L. Macfie eds., (Indiana: Liberty Fund, 1984) p. 9 [Originally published 1759]

²¹⁸ *Ibid.*, pp. 130-131

²¹⁹ Immanuel Kant, *Groundwork for the Metaphysics of Morals*, p. 7

²²⁰ Charles Darwin, *The Descent of Man*, p. 63

²²¹ *Ibid.*, p. 63

²²² Friedrich Nietzsche, *On The Genealogy of Morality*, p. 34

moral tendencies are not innate but acquired.²²³ Darwin believed that the moral sense was indeed inherited, though he also acknowledged that pertaining to certain virtuous tendencies, social instruction and habit may play a more dominant role in the development of individuals' moral character.²²⁴ On this point, Darwin was not too far removed from Aristotle, who felt that moral virtues needed to be acquired through habit.²²⁵ Evolutionary ethics, therefore, is understood here as the attempt to provide an account of the origin of ethics (equated roughly to altruism, as declared in section 1.1) in light of the seeming dichotomy of altruistic behaviour and the 'struggle for existence'.

2.2.2 Evolutionary Explanations for Altruism

Theorists within the field of evolutionary ethics or sociobiology as they are understood in this chapter, have proposed a framework as a solution to the paradox of altruism in an evolutionary context. This framework is the crux of what evolutionary ethics is understood here to entail. To illustrate, three distinct elements of the evolutionary framework for understanding ethics will now be highlighted (though these may not be exhaustive); i) kin/gene selection, ii) group selection, and iii) reciprocal altruism. It should also be noted that these particular facets of evolutionary explanations for morality may not be mutually exclusive – a point also acknowledged by Edward Wilson.²²⁶

Kin/Gene Selection

An important feature of evolutionary ethics as it is understood here is the kin or gene selection model for explaining morality. This model stems from the convergence of Darwinian natural selection and the principles of genetic inheritance, originally deduced by

²²³ Charles Darwin, *The Descent of Man*, p. 63

²²⁴ *Ibid.*, p. 79

²²⁵ Aristotle, *Nicomachean Ethics*, p. 952

²²⁶ Edward O. Wilson, *On Human Nature*, (London: Penguin, 1995) p. 187 [Originally published 1978]

Gregor Mendel in the nineteenth century. This vision of evolution, known as the ‘neo-Darwinian synthesis’ or in the writings of certain authors, ‘gene-selectionism’, was popularised by Ronald Fisher in his work *The Genetical Theory of Natural Selection*.²²⁷ It centres on the premise that nature ‘selects’ at the level of the gene as opposed to the individual – though this vision of evolution is not universally held.²²⁸ The advent of genetics led to the discovery that the traits to which Darwin referred, are chemically encoded in strands of DNA – genes. Neo-Darwinian theory understands, therefore, that the survival of the fittest pertains to genes; genes which contribute to individuals’ fitness will be passed on and become more numerous in the gene pool than genes which have a negative effect on individuals’ fitness.

The British biologist J.B.S. Haldane outlined a gene-centred perspective which sought to explain altruistic behaviour. He proposed that from the hypothetical point of view of a gene, it would be beneficial to sacrifice oneself to save another if the benefactor of such sacrifice carried the same gene. In terms of natural selection’s struggle for survival, the cost of the sacrifice would be negated by the benefit. Haldane proposed that within families, altruistic behaviour could emerge given that such behaviour ultimately aids the altruist’s genes. He uses the example of a parent saving a drowning child to illustrate:

Let us suppose that you carry a rare gene which affects your behaviour so that you jump into a river and save a child, but you have one chance in ten of being drowned, while I do not possess the gene, and stand on the bank and watch the child drown. If the child is your own child or your brother or sister, there is an even chance that the child will also have the gene, so five such genes will be saved in children for one lost in an adult. If you save a grandchild or nephew the advantage is only two and a half to one. If you only save a first cousin, the effect is very slight. If you try to save your first cousin

²²⁷ R.A. Fisher, *The Genetical Theory of Natural Selection*, (Oxford: Oxford University Press, 1958)

²²⁸ For example, significant evolutionary theorists such as Ernst Mayr and Stephen Jay Gould disagree. See Ernst Mayr, *Evolution and the Diversity of Life: Selected Essays*, (Massachusetts: Harvard University Press, 1976) p.13 and Stephen Jay Gould, *The Panda’s Thumb*, (New York: Penguin, 1980) p. 76

once removed the population is more likely to lose this valuable gene than to gain it.²²⁹

Haldane was able in this model, to logically postulate how altruistic behaviour may not necessarily conflict with the competitive principles of natural selection, albeit in familial situations. Furthermore, he notes that some circumstances may provide highly suitable conditions for such a model to work; beehives and ants' nests for example, as in these situations all members are "literally brothers and sisters."²³⁰ This idea of kin selection seems to allow for a more lenient description of the struggle for existence; one which allows for concern for the welfare of others as opposed to the concern for only one's own welfare; natural selection, then, is not necessarily an uncompromising war of all against all.

The biologist W.D. Hamilton later developed upon this notion of kin selection by explaining how pro-social behaviour, morality included, would be consistent with the principles of competition in natural selection if it helped to maximise relatives' fitness – a concept he terms 'inclusive fitness'. This, he believed, "... implies limited restraint on selfish competitive behaviour and the possibility of limited self-sacrifices."²³¹ Hamilton suggested that the probability of whether or not an individual would be expected to act for the benefit of another is directly proportional to the probability of the 'other' sharing the individual's gene. He suggests that a gene which causes altruistic behaviour towards brothers and sisters will only become prominent in the gene pool when the circumstances are "generally such that the gain is more than twice the loss" as siblings have a fifty percent chance of carrying the same gene.²³² Adhering strictly to this model, which as Hamilton rightly notes is merely a model, "we expect to find that no-one is prepared to sacrifice his life for any single person

²²⁹ J.B.S. Haldane, 'Population Genetics', *New Biology*, 18. (1955) p. 44

²³⁰ J.B.S. Haldane, 'Population Genetics', p. 44

²³¹ W.D. Hamilton, 'The Genetical Evolution of Social Behaviour I', *Journal of Theoretical Biology*, 7. (1964) p. 1

²³² W.D. Hamilton, 'The Evolution of Altruistic Behaviour', *The American Naturalist*, 97.896 (1963) p. 355

but that everyone will sacrifice it when he can thereby save more than two brothers, or four half-brothers, or eight first cousins....”²³³

Of course, it is important to note that the principles of kin selection outlined by Haldane and Hamilton are general principles. Their examples of self-sacrificing kin are not illustrative of how individual humans consciously behave; for example, they do not take into account psychological motives/personal characteristics which may perhaps maintain a greater influence on our behaviour. Notwithstanding, the models of gene/kin selection presented demonstrate that the long term average outcome of behavioural strategies will be such that pro-social/altruistic predispositions will evolve, and moreover, will be to an extent dependent on the relatedness of the individuals involved in a given situation. As Hamilton notes, he seeks to hazard a “generalised unrigorous” principle, outlined as follows, “The social behaviour of a species evolves in such a way that in each distinct behaviour evoking situation the individual will seem to value his neighbour’s fitness against his own according to the coefficients of relationship appropriate to that situation.”²³⁴

Following from, and building upon Haldane, Hamilton and others, Richard Dawkins proposed an analogical framework for understanding how altruism can evolve from the gene-centred perspective. Dawkins finds it instructive to envisage individual bodies as fleeting, temporary amalgams of genes which replicate themselves and “leap from body to body down the generations” with near immortality.²³⁵ In addition, Dawkins characterises these genes as fundamentally ‘selfish’. However, he is not using the characteristic of fundamental selfishness in the same way that Augustine or Hobbes might; that humanity is fundamentally inclined towards the evil or selfish action. Dawkins’ selfish gene theory exemplifies the problem to which Nietzsche once alluded, as he wrote that science is

²³³ W.D. Hamilton, ‘The Genetical Evolution of Social Behaviour I’ p. 16

²³⁴ W.D. Hamilton, ‘The Evolution of Social Behaviour II’, p. 19

²³⁵ Richard Dawkins, *The Selfish Gene*, p. 34

“exposed to the seduction of language.”²³⁶ The literal understanding of selfishness, as it is used in common language, is not what Dawkins implied by the term. As a result, his use of analogical language was challenged by philosophers such as Mary Midgley, who rebuked the idea that genes could be selfish, given that they are not conscious entities.²³⁷ Dawkins’ intentions, however, were not to ascribe conscious characteristics to genes, but rather to illustrate from a behaviouristic context, how genes function.²³⁸ Henceforth, I may employ such analogical language here in order to illustrate certain points pertaining to evolutionary ethics – though I am mindful that strictly speaking such language is not correct.

From this point of view, differential selection occurs at the level of the gene; the principle of survival of the fittest does not apply to individuals. Dawkins uses anthropomorphic language to illustrate the behaviour of genes; if genes had conscious intentions, they would seek to become more numerous in the gene pool – their primary wants would be to replicate and proliferate.²³⁹ However, in achieving these purely selfish aims, genes can, as in the models of Haldane and Hamilton, aid replicas of themselves in other bodies. Therefore, by distinguishing between the gene and the individual, it becomes possible to maintain the fundamental principle of a struggle for existence whilst also accounting for altruistic acts at the level of the individual. The Hobbesian war of all against all can transpire at the level of the gene whilst altruistic acts can flourish at the level of the individual without any apparent contradictions. In other words, what appears to be altruism is brought about by genetic selfishness.²⁴⁰

²³⁶ Friedrich Nietzsche, *On The Genealogy of Morality*, p. 26

²³⁷ Mary Midgley, ‘Gene-Juggling’, *Philosophy*, 54.210 (1979) p. 439

²³⁸ Richard Dawkins, ‘In Defence of Selfish Genes’, *Philosophy*, 56.218 (1981) p. 557

²³⁹ Richard Dawkins, *The Selfish Gene*, p. 88

²⁴⁰ *Ibid.*, p. 88

Group Selection

Another aspect of evolutionary explanations of altruism pertains to the concept of ‘group selection’. Edward Wilson defines group selection as when selection “affects two or more members of a lineage group as a unit. Just above the level of the individual we can delimit various [sic] of these lineage groups: a set of sibs, parents, and their offspring; close-knit tribe of families... and so on.”²⁴¹ Although natural selection would be expected to ‘oppose’ altruistic behaviour if such behaviour is detrimental to the survival of the individual, group selection would ‘allow’ for such behaviour if that behaviour was of benefit to a group, i.e. a family, tribe, etc. Although Darwin conceded that the circumstances under which virtuous tendencies evolve would become too complex to follow through, he did allude to this idea of group selection.²⁴² He postulated that if such behaviour was profitable to the community, then no tension arises between the principles of competition and altruism, as the behaviour is still consistent with survival of the fittest – though the fittest becomes the group as opposed to the individual.²⁴³ Dawkins outlines the concept as follows:

[A] group, such as a species or a population within a species, whose individual members are prepared to sacrifice themselves for the welfare of the group, may be less likely to go extinct than a rival group whose individual members place their own selfish interests first. Therefore, the world becomes populated mainly by groups consisting of self-sacrificing individuals. This is the theory of ‘group selection’²⁴⁴

This model of selection would appear to explain how altruistic behaviour could exist without conflicting with the principle of competition.

Despite the appeal of such a model (Dawkins acknowledges that it was long assumed to be true) there are significant challenges to the theory. If a minority of individuals

²⁴¹ Edward O. Wilson, *Sociobiology*, p. 106

²⁴² Charles Darwin, *The Descent of Man*, p. 63

²⁴³ Charles Darwin, *The Origin of Species*, p. 181

²⁴⁴ Richard Dawkins, *The Selfish Gene*, p. 7

(cheats) in the group exploit the altruistic behaviour of others, thus benefiting from the group without incurring any ‘cost’ to themselves, then their behaviour would subsequently proliferate the group at a greater rate than the altruists. Dawkins articulates this problem with group selection:

Even in the group of altruists, there will almost certainly be a dissenting minority who refuse to make any sacrifice. It [sic] there is just one selfish rebel, prepared to exploit the altruism of the rest, then he, by definition, is more likely than they to survive and have children. Each of these children will tend to inherit his selfish traits. After several generations of this natural selection, the ‘altruistic group’ will be over-run by selfish individuals, and will be indistinguishable from the selfish group.²⁴⁵

In highlighting this problem with group selection, Dawkins thus seeks to justify his own favouring of gene selection as a model for explaining altruistic behaviour.

Whilst this problem with group selection is substantial, it may not be a situation of exclusivity; as Wilson noted, despite certain problems with the model of group selection, it may still play some role in altruistic behaviour.²⁴⁶ For example, philosophers of biology Elliot Sober and David Sloan Wilson offer a defence of group selection by acknowledging the complexities of social behaviour, particularly the ability/tendency to punish the “dissenting minority”, to use Dawkins’ term quoted above.²⁴⁷ As such, they suggest that the “wholesale rejection of group selection” is misconceived.²⁴⁸ In their view, group selection may play a strong role – though not necessarily an exclusive one – in explaining the “ultrasocial” characteristics of human behaviour, such as altruism.²⁴⁹ Further dispute surrounding the significance of group selection arose with E.O. Wilson’s co-authored paper ‘The Evolution of Eusociality’, when he and his co-authors challenged the models of kin or

²⁴⁵ Ibid., pp.7-8

²⁴⁶ Edward O. Wilson, *On Human Nature*, p. 187

²⁴⁷ Elliot Sober and David Sloan Wilson, *Unto Others: The Evolution and Psychology of Unselfish Behaviour*, (Massachusetts: Harvard University Press, 1998) p. 151

²⁴⁸ Ibid., p. 330

²⁴⁹ Ibid., p. 158

gene selection for explaining altruism and re-asserted the strength of group selection²⁵⁰ – E.O. Wilson then furthered this thesis in his book *The Social Conquest of Earth*.²⁵¹ In a review of Wilson’s renewed interest in group selection, Dawkins was highly critical, describing it as “erroneous” and a “perverse misunderstanding” of evolutionary theory.²⁵² Irrespective of whether one aligns themselves fully with group selection or not, it can be stated here that group selection may play some role, and therefore, is an element of evolutionary ethics as it is understood here.

Reciprocal Altruism

Another aspect of the evolutionary answer to the altruism paradox, and thus of evolutionary ethics as understood in this chapter, is the notion of reciprocal altruism; one acts morally towards others with the hope/expectation that they would act similarly in return. This notion is not specific to modern genetic theories but has emerged throughout philosophical discourse for millennia, as Aristotle wrote, “Friendly relations with one’s neighbours, and the marks by which friendships are defined, seem to have proceeded from a man’s relations to himself.”²⁵³ This may be an earlier formation of the Christian notion of loving thy neighbour as oneself (Mark 12:21), though Aristotle’s motives are seemingly less noble. Hume articulated a similar sentiment in his *Treatise*, “Men being naturally selfish, or endow’d only with a confin’d generosity, they are not easily induc’d to perform any action for the interest of strangers, except with a view to some reciprocal advantage....”²⁵⁴

²⁵⁰ Martin A. Nowak, Corina E. Tarnita and Edward O. Wilson, ‘The Evolution of Eusociality’, *Nature*, 466.7310 (2010) pp. 1057-1062

²⁵¹ Edward O. Wilson, *The Social Conquest of Earth*, (London: W.W. Norton and Co., 2012)

²⁵² Richard Dawkins, ‘The Descent of Edward Wilson’, *Prospect*, (May 2012)

²⁵³ Aristotle, *Nicomachean Ethics*, p. 1081

²⁵⁴ David Hume, *Treatise of Human Nature*, p. 519

Similarly, Adam Smith wrote that “It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest.”²⁵⁵

From a genetic perspective, however, the virtue of reciprocal altruism is in a sense irrelevant; reciprocal altruism is merely posited to add to the explanation of pro-social behaviour (and hence, morality). American biologist Robert L. Trivers proposed the idea of reciprocal altruism to illustrate how altruistic behaviour can be selectively beneficial between more distant relatives than with the kin selection model, which is primarily concerned with relatedness. Reciprocal altruism can be selected for even when the recipient is so distantly related to the altruist that kin selection could not apply.²⁵⁶ Dawkins provides an illustration of how reciprocal altruism could be played out in a real-world scenario:

Suppose a species of bird is parasitized by a particularly nasty kind of tick which carries a dangerous disease... Normally an individual bird can pull off its own ticks when preening itself. There is one place however – the top of the head – which it cannot reach with its own bill... An individual may not be able to reach his own head, but nothing is easier than for a friend to do it for him. Later, when the friend is parasitized himself, the good deed can be paid back. Mutual grooming is in fact very common in both birds and mammals.²⁵⁷

From the perspective of differential survival, such altruistic acts can, as Trivers states, benefit the organism performing them.²⁵⁸ In other words, acts of reciprocal altruism, whilst seeming to be altruistic and thus opposed to the principle of survival of the fittest, will ultimately be of benefit to the altruists’ genes. In addition to such acts of direct reciprocity, indirect reciprocity can also occur with a similar premise. Indirect reciprocity can evolve as a social norm (not dissimilar to group selection) where altruistic actions may be reciprocated not by the original beneficiary, but by other members of a society, as the biologist Richard

²⁵⁵ Adam Smith, *The Wealth of Nations: I*, R.H. Campbell, A.S. Skinner and W.B. Todd eds., (Indiana: Liberty Press, 1981) pp. 26-27 [Originally published, 1776]

²⁵⁶ Robert L. Trivers, ‘The Evolution of Reciprocal Altruism’, *The Quarterly Review of Biology*, 46.1 (1971) p. 35

²⁵⁷ Richard Dawkins, *The Selfish Gene*, p. 183

²⁵⁸ Robert L. Trivers, ‘The Evolution of Reciprocal Altruism’, p. 35

Alexander explains, “*Indirect reciprocity* I have defined as those cases in which the dividends from social investments are likely to come from individuals other than those helped (or hurt) by the original actor.”²⁵⁹ E.O. Wilson also endorses the idea, as he writes in a similar manner, “A population at large that enters into a series of such moral obligations, that is, reciprocally altruistic acts, will be a population with a generally increased genetic fitness.”²⁶⁰ Again we should be mindful that the model of reciprocal altruism seeks to explain general behavioural predispositions rather than provide a specific account of how individuals act in given circumstances; as such they do not take into account the innumerable variables that influence specific behaviours.

Notwithstanding the mutual benefits that direct/indirect reciprocal altruism brings to populations, the problem which was discussed with regard to group selection re-emerges; why not cheat? Why not attempt to benefit from the altruism of others without exerting the time and energy required to be altruistic in return. Wilson, however, explains that “in an advanced personalised society, where individuals are identified and the record of their acts is weighed by others it does not pay to cheat even in the purely Darwinist sense.”²⁶¹ Among species with the capabilities for memory and recognition, such as *Homo sapiens*, reputation, punishments, praise, blame and other social instincts must be considered. Darwin himself recognised this point, by discussing how these societal instincts undoubtedly bore weight upon people’s moral actions.²⁶²

Individuals would be unlikely to cheat in social scenarios as they would acquire a bad reputation. As a result, others would be suspicious of cheating individuals; a motif portrayed through Aesop’s fable of the boy and the wolf. Humanity’s complex social intuitions allow for extreme plasticity with regard to models of reciprocal altruism; for

²⁵⁹ Richard Alexander, ‘A Biological Interpretation of Moral Systems’, *Zygon: Journal of Religion and Science*, 20.1 (1985) p. 9

²⁶⁰ Edward O. Wilson, *Sociobiology: The New Synthesis*, p. 120

²⁶¹ *Ibid.*, p. 120

²⁶² Charles Darwin, *The Descent of Man*, p. 85

example, Dawkins considers subtle cheating, and the evolution of mechanisms for detecting cheating. As he states, “There is no end to the fascinating speculation that the idea of reciprocal altruism engenders when we apply it to our own species.”²⁶³ For some, such as Mary Midgley, this issue is a serious weakness in attempts to fully explain altruism in an evolutionary framework; human behaviour is far too nuanced to be understood solely in terms of evolutionary costs/benefits.²⁶⁴ However, the heuristic value of such models outweighs the negatives that result from the oversimplifications involved; evolutionary explanations of morality may not be able to account for the intricacies of human behaviour, but they may provide a solution to the paradox of why altruism should exist at all.

Having now outlined what is understood by ‘Christian ethics’, in section 2.1, and what is understood by ‘evolutionary ethics’, in section 2.2, perceived conflicts between the two systems can now be addressed. Evolutionary ethics could be seen to conflict with the three tenets of Christian ethics taken in section 2.1; i) moral freedom, ii) *agape* and neighbourly love, and iii) natural law. To illustrate that Christian ethics and evolutionary ethics as I understand them do not conflict, these three potential points of conflict will now be addressed and ultimately shown to be insubstantial. Moreover, it will be argued that there may in fact be distinct points of coalescence between the two systems.

2.3 Perceived Conflict with Moral Freedom

As discussed in section 2.1.1, an important prerequisite for a Christian or theological understanding of ethics pertains to moral freedom; humanity must have free will in order for their moral decisions to be meaningful. However, following from the theories of evolutionary ethics as discussed above, it could be argued that genetic predispositions could mitigate human freedom with regard to moral behaviour. If moral behaviour is merely a

²⁶³ Richard Dawkins, *The Selfish Gene*, p. 188

²⁶⁴ Mary Midgley, *The Solitary Self: Darwin and the Selfish Gene*, (Durham: Acumen, 2010) p. 139

result of genetic tendencies, then perhaps it is not ‘free’ in the sense required by Christian ethics; it is merely the manifestation of genetic ‘wants’ – permitting anthropomorphic language, given that genes cannot ‘want’. By explaining altruism in terms of genetic selection, it has been argued that evolutionary explanations of ethics “take the altruism out of altruism.”²⁶⁵ Daniel Dennett labels this evolutionary understanding of altruism as a ‘pseudo-altruism’; a form of altruism ultimately founded upon self-interest.²⁶⁶ Dennett, moreover, suggests that no distinction can be made between this mode of altruism and ‘genuine’ altruism. Indeed, he feels that ‘genuine’ altruism is a vacuous and indefinable concept; those who seek a Platonic vision of altruism may be searching in vain.²⁶⁷ As such, a prominent interpretation of evolutionary altruism proposes that altruism is merely a surface-level manifestation of genetic differential selection, and therefore, not the result of free choice (though I will disagree with this premise below).

One such proponent is Wilson, who distinguishes between hard-core and soft-core altruism. Hard-core altruism, Wilson states, “can be irrational and unilaterally directed at others; the bestower expresses no desire for equal return and performs no unconscious actions leading to the same end.”²⁶⁸ This might be an approximation of what one would consider as genuine altruism, which is not dependent upon consciously selfish desires for reciprocation. Such morality, Wilson suggests, is unique to close relatives (kin selection) and would steeply decline in frequency and intensity as the relationship becomes more distant.²⁶⁹ Soft-core altruism, however, is fundamentally selfish. It is “calculating, often in a wholly conscious way” and is “orchestrated by the excruciatingly intricate sanctions and demands of society.”²⁷⁰ In Wilson’s view then, morality is not a free decision to be moral for

²⁶⁵ Robert Trivers, ‘The Evolution of Reciprocal Altruism’, p. 35

²⁶⁶ Daniel C. Dennett, *Freedom Evolves*, (London: Penguin, 2003) p. 196

²⁶⁷ *Ibid.*, p. 197

²⁶⁸ Edward O. Wilson, *On Human Nature*, p. 155

²⁶⁹ *Ibid.*, p. 155

²⁷⁰ *Ibid.*, p. 156

morality's own sake, but a kind of self-serving, Machiavellian genetic cunningness. For Wilson, human altruism is soft-core, selfish, and only exists in the hard form in kin.²⁷¹ It exists to serve the purposes of selfish genes, and has no other demonstrable function.²⁷² The higher level freedom (however it is understood) necessary for Christian ethics may thus be interpreted as being overwritten at the genetic level. Others such as Ruse have agreed. Ruse maintains the belief that morality is an illusory concept which has evolved to further our reproductive ends, "nothing more, but also, nothing less."²⁷³ He feels morality is put in place by our genes to make us efficient social animals.²⁷⁴

Midgley articulates a comparable reading of how evolutionary understandings of altruism have been presented, though unlike Ruse and Wilson, she disagrees and suggests that such understandings are overstating one aspect of multiple interacting causes.²⁷⁵ She notes that sociobiology has been presented as hostile to the concept of free will and thus, may be understood as 'fatalistic'; the representation of human behaviour in terms of genetic 'purposes' denigrates humans to "being in fact only ineffectual pawns, puppets or vehicles of these 'hidden masters'."²⁷⁶ I adopt Midgley's use of the term 'fatalism' to characterise a particular reading of evolutionary ethics; namely, that our subjective experience of 'free thought' is illusory, or more specifically applied in this case, that our 'free morality' is in fact a manifestation of genetic intentions.²⁷⁷ A fatalistic interpretation views genes as parasites whose chemistry continually distorts our mental processes only to secure their own

²⁷¹ Ibid., p. 162

²⁷² Ibid., p. 167

²⁷³ Michael Ruse, 'The Evolution of Ethics: Past and Present', Philip Clayton and Jeffery Schloss eds., *Evolution and Ethics: Human Morality in Biological and Religious Perspectives*, (Cambridge: Erdmans, 2004) p. 27

²⁷⁴ Michael Ruse, 'Evolutionary Ethics: What We Can Learn From the Past', *Zygon: Journal of Religion and Science*, 34.3 (1999) p. 447

²⁷⁵ Mary Midgley, *Evolution as a Religion: Strange Hopes and Stranger Fears*, (London: Methuen, 1985) p. 128

²⁷⁶ Ibid., p. 128

²⁷⁷ Midgley's use of the term 'fatalism' may be problematic given that fatalism can be variously construed. For example, another meaning of fatalism could be a view of resignation; that all events are inevitable, though this does not necessarily preclude free thought. Fatalism may also be understood in a wider sense, irrespective of modes of determinism, for example, in discussions on predestination. Bernard Berofsky defines 'fatalism' as the view that forces determine outcomes independent of human wishes, though he also discusses further ambiguities with the term. Bernard Berofsky, 'Determinism', Robert Audi ed., *The Cambridge Dictionary of Philosophy*, 2nd ed., (Cambridge: Cambridge University Press, 1999)

survival.²⁷⁸ In effect, this view poses a challenge to our conception of ourselves to the point where the statement ‘our morality’ may seem unintelligible; if ‘we’ are not necessarily entities in ourselves but amalgamations of genes, then it may be difficult to even speak of ‘I’ or ‘we’ rather than a particular group of genes. However, the conclusion is the same; we do not have control over our moral actions, either because the ‘we’ is eroded, or because our actions are fully governed by genetics. This understanding of sociobiology is clearly threatening to the theological perquisite of moral freedom; if our behaviour is fully governed by our genes, then the freedom essential for morality would be lost and thus, sociobiology would clearly conflict with Christian ethics as I understand it.

On this reading of evolutionary explanations of morality, Midgley is duly critical. She contests that schemes which interpret natural selection as intrinsically selfish bears resemblance to a Hobbsian political outlook. Midgley feels that sociobiology as presented by Dawkins and others, is a misguided quest to force evolutionary theory to fit the “old, exclusively self-benefiting” model of Hobbes’ egoism.²⁷⁹ As such, she challenges Dawkins’ scientific objectivity – a criticism echoed in more recent commentaries.²⁸⁰ Midgley’s conclusion is that Dawkins’ image of ruthlessly selfish genes manipulating bodies for their own ends leads us to a “paralysis of complete despair.”²⁸¹ In this regard, she would disagree with the core message of this thesis – that such evolutionary understandings of ethics can provide an optimistic worldview. For her, they provides the opposite – fatalistic nihilism, something contrary to the idea of hope. However, the fact that Midgley finds the conclusions of evolutionary ethics distasteful does not amount to a substantial flaw in its depiction of our self-image; this is a matter of personal, philosophical, or perhaps socio-political inclination. Moreover, upon a closer reading of sociobiology, the interpretation which fears the fall of

²⁷⁸ Mary Midgley, ‘Selfish Genes and Social Darwinism’, *Philosophy*, 58.225 (1983) p. 376

²⁷⁹ *Ibid.*, p. 374

²⁸⁰ See for example, Fern Elsdon-Baker, *The Selfish Genius: How Richard Dawkins Rewrote Darwin’s Legacy*, (London: Icon, 2009) p. 103

²⁸¹ Mary Midgley, ‘Selfish Genes and Social Darwinism’, p. 377

human moral freedom to genetic fatalism can be shown to be ultimately erroneous for at least three reasons; a confusion of utility and purpose, a failure to appreciate the role of human consciousness, and a narrow reading of the alleged dichotomy of reductionism and emergence.

Errors in the Perceived Conflict with Human Freedom: Utility and Purpose

Firstly is the confusion of utility and purpose. Nietzsche puts it well as he states that “the origin of the emergence of a thing and its ultimate usefulness, its practical application and incorporation into a system of ends, are *toto coelo* separate.”²⁸² Anything which currently exists, Nietzsche correctly points out, can be constantly interpreted, altered, requisitioned, transformed and redirected for new purposes. Therefore, a thing’s meaning or purpose for which it was created or emerged, becomes obscured or completely obliterated.²⁸³ An organ for example, is not necessarily used for the purpose for which it evolved; rather, it has undergone a long series of adaptations and fulfilled various needs. Organs can have a long chain of functions which need not be connected, but “sometimes just follow and replace one another at random.”²⁸⁴

In scientific parlance, this concept has been termed an ‘exaptation’ by Gould and Elisabeth S. Vrba. It refers to when a character (e.g. an organ) evolves for a particular purpose, or no purpose, but is later utilised for a different role.²⁸⁵ Fingers, for example, may have evolved for catching prey or climbing to escape predators, but are now used for a plethora of other purposes; typing, playing the piano, etc. Morality then, may be considered as an exaptation; it could have evolved to serve a particular purpose (genetic selfishness) but may now be used for wholly other, unrelated purposes – for example, legitimate altruism if

²⁸² Friedrich Nietzsche, *On The Genealogy of Morality*, p. 51

²⁸³ *Ibid.*, p. 51

²⁸⁴ *Ibid.*, p. 51

²⁸⁵ Stephen Jay Gould and Elisabeth S. Vrba, ‘Exaptation – A Missing Term in the Science of Form’, *Paleobiology*, 8.1 (1982) p. 6

such a thing is taken to exist. Consequently, the conclusion that morality is an illusory manifestation of genetic intentions is misconstrued. Interestingly, Ruse rightly expresses caution in this regard, “To suppose that the story of origins tells of truth or falsity is to confuse causes with reasons. In a Spencerian fashion, it is to jumble the way things came about with the way things really are.”²⁸⁶ He expresses regret that he has in the past made this conceptual error,²⁸⁷ yet he still proposes that morality is a manifestation of genetic selfishness.

The fatalistic interpretation of sociobiology implies that genes are the sole arbiters of our behaviour. This makes a substantial conceptual leap deriving ultimate imperatives from origins. Our genetics undeniably maintain a powerful influence over our behaviour; our innate desires to survive, procreate and care for our offspring, for instance, can lead to acts most noble or imprudent. However, it would be fallacious to therefore conclude that our genes are the fundamental driving force of our actions. With respect to this issue, Dennett follows Nietzsche’s warnings about inferring utility from purpose, as he states, “But we must not turn this important fact about our biological limitations into the massively misleading idea that the *summum bonum* at the source of every chain of practical reasoning is the imperative of our genes.”²⁸⁸ Therefore, just because certain aspects of our behaviour may have stemmed from genetic predispositions does not then imply that behaviour is fully determined by our genes, as Dawkins states, “genes have no monopoly on determinism” – there are psychological, emotional, and other multifaceted factors which influence our behaviour.²⁸⁹

²⁸⁶ Michael Ruse, ‘Evolutionary Ethics: A Phoenix has Arisen’ p. 101

²⁸⁷ Ibid., p. 111(n)

²⁸⁸ Daniel Dennett, *Darwin’s Dangerous Idea*, pp. 472-473

²⁸⁹ Richard Dawkins, *A Devil’s Chaplain: Selected Essays*, (London: Phoenix, 2003) p. 127

The Role of Human Consciousness

A second but related point of error in the fatalistic interpretation of sociobiology is the failure to fully appreciate the significance of human consciousness. When envisioning morality as an evolutionary exaptation, it could be asked that if morality originally evolved to serve genetic selfishness, but now serves another purpose, what is the other purpose? What is morality's current utility? The answer to this question may not be definitive, given that it could be maintained that morality is still in part a manifestation of genetic intentions. Notwithstanding, it can be argued that the powerful phenomenon of human consciousness may play an even greater role in our behaviour than our genes. This has been stressed by Dawkins in his qualifying remark, "We, alone on earth, can rebel against the tyranny of our selfish replicators."²⁹⁰ Humanity's unique capacity for conscious foresight allows us to reflect and consider moral issues as opposed to being blindly led by our animalistic urges. Within philosophy though, consciousness itself is a contentious issue – at least at present, it is a phenomenon we have not yet been able to fully grasp. Yet we are quite adamant it exists; we feel it distinguishes us from automatons or mere amalgams of genetic parasites.

Dennett, who is himself a philosopher engaged in discourse surrounding the idea of consciousness, puts forth a concurrent view.²⁹¹ He feels that the cognitive architecture of the self allows us to become moral agents.²⁹² Our competence for understanding the reasons for morality, and subsequently reflecting upon those reasons, allow us to change them into different reasons.²⁹³ This is not a new realisation; Hume recognised it, as he differentiated between natural and man-made virtues.²⁹⁴ Huxley too understood that it was humanity's conscience (understood as an aspect of consciousness) which revolted against the moral

²⁹⁰ Richard Dawkins, *The Selfish Gene*, p. 201

²⁹¹ For example, see Daniel C. Dennett, *Consciousness Explained*, (London: Allen Lane, 1991). For criticism and commentary, see Bo Dahlbom ed., *Dennett and his Critics: Demystifying Mind*, (Oxford: Blackwell, 1993)

²⁹² Daniel C. Dennett, *Freedom Evolves*, pp. 259-260

²⁹³ Ibid., p. 260

²⁹⁴ David Hume, *A Treatise of Human Nature*, p. 477

indifference of nature.²⁹⁵ As such, nature is not the sole commander of our moral compass. The view then of sociobiology as understood here, suggests that morality indeed has natural biological origins, however, these origins no longer dictate our moral fibre; conscious thinking, reflection and culture now too plays a prominent, perhaps even greater role. Moreover, it is not an either/or situation, but a complex amalgam of motivations which are perhaps too intricate to fully understand.

Reductionism and Emergence

Once the biological principles of life had been unearthed through the study of evolution, conjecture began as to what implications this would have for our understanding of ourselves. However, the application of scientific theories to the analysis of human nature has been met with resistance, perhaps because of the feeling that it undermines human uniqueness. It may also be a result of the understanding that human nature or the human self encompasses religious experiences and morality; some of the most cherishable features of our existence. Defensiveness towards scientific explanations of these phenomena was thus anticipated by the seminal psychologist William James in 1902, as he felt it necessary to provide somewhat of a disclaimer when attempting to use the sciences to explain religious experiences, “When I handle them (religious experiences) biologically and psychologically as if they were curious facts of individual history, some of you may think it a degradation of so sublime a subject... Such a result is of course alien to my intention.”²⁹⁶ John Paul II also explicated limitations with regard to how the physical sciences can explain human nature by posing an ontological discontinuity between humanity, with its capacity for spirituality, and the rest of

²⁹⁵ T.H. Huxley, *Evolution and Ethics*, p. 59

²⁹⁶ William James, *On The Varieties of Religious Experience*, Martin E. Marty ed., (London: Penguin, 1982) p. 6 [parenthesis mine] [Originally published 1902]

living matter.²⁹⁷ John Paul II felt that self-consciousness, self-awareness, and pertinently in the context of this thesis, moral conscience, must be analysed through philosophical reflection; they are beyond the reach of experimental scientific research.²⁹⁸

Humanity's moral sense is a specific element of human nature which John Paul II felt was beyond the ambit of scientific explanation. Though John Paul II appreciates the explanatory prowess of the natural sciences in relation to the physical continuity of evolution, he draws a partisan when it comes to the social/moral realms – a partisan which, as we have seen, is transcended by the sociobiologists. John Paul II's search for a partisan here points in the direction of an ongoing debate on reductionism and emergence. John Paul II feels that higher-level complexes, such as human nature, cannot be explained in terms of reduction to lower levels. Such a reductionist explanation would ultimately lead to the fatalistic reading of sociobiology; that our behaviour is fatally bound and explicable in terms of unscrupulous genetic parasites. Reductionist explanations of this sort are, according to John Paul II, "incompatible with the truth about man."²⁹⁹

It is argued here, however, that evolutionary explanations of ethics are not reductionist in this sense. This can be shown to be a narrow view of reductionism that suggests all things including human nature can be understood in terms of the principles of physics and chemistry, which would again threaten the idea of moral freedom. By accounting for higher-level subjects such as human nature and morality in terms of lower-level constituents, many may believe that the higher-level subjects cease to exist; they are merely corollaries of the interactions of their constituent elements. Nancey Murphy and George Ellis argue that if one accepts sociobiology, then one arrives at this conclusion – though they themselves reject the premise. They feel that the sociobiological project of

²⁹⁷ John Paul II, 'The Origins and Early Evolution of Life', *Papal Addresses to the Pontifical Academy of Sciences 1917-2002 and to the Pontifical Academy of Social Sciences 1994-2002*, (Vatican City: The Pontifical Academy of Sciences, 2003) p. 373 [Originally published 1996]

²⁹⁸ Ibid., p. 373

²⁹⁹ Ibid., p. 373

explaining morality in terms of genetics deprives morality of its own essence; it reduces the moral to the nonmoral, hence clearly conflicting with moral freedom.³⁰⁰ These narrow presentations of reductionism are however, as the late Irish philosopher Ernan McMullin incisively writes, based on common misapprehensions of reductionism.³⁰¹

McMullin believes that the terms ‘reducitonist’ and ‘reductionism’ have acquired a negative stigma, derived from the “widely-shared belief that a reductionist is someone who denies the existence of a strongly evidenced reality.”³⁰² This is exemplified with Murphy and Ellis’ criticism of genetic accounts of morality. Yet this criticism is based on an oversimplified interpretation. Reductionist accounts of any entity need not deny its essence, let alone its existence. Were this to be the case, McMullin admits, reductionism would indeed be a threatening programme.³⁰³ He uses the example of colour to illustrate that reductionism has no such repercussions, “The colour of an object is no less real because it can be explained in terms of the properties and configuration of the constituents of the body’s surface layer of atoms.”³⁰⁴ With regard to morality, just because it can be explained in terms of genetics does not mean that it is any less ‘real’ or that we are any less free. Furthermore, as we seen, even strident advocates of sociobiology such as Dawkins and Dennett would not hold that morality can be explained completely in terms of genetics – genetics may merely explain its origins.

McMullin also challenges the common view of the nature of reductionism, namely, that its chief concern is reduction. He explains this counter-intuitive notion by stating that when the science of a complex whole is reduced by the science of its constituent parts, it may be better described in some cases as an *enlargement* of the lower-level science.³⁰⁵ The

³⁰⁰ Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, pp. 234-235

³⁰¹ Ernan McMullin, ‘Biology and the Theology of the Human Person’, *Zygon: Journal of Religion and Science*, 48.2 (2013) p. 310 [Originally published 2000]

³⁰² *Ibid.*, p. 310

³⁰³ *Ibid.*, p. 310

³⁰⁴ *Ibid.*, p. 310

³⁰⁵ *Ibid.*, p. 310

connotations of the term ‘reduction’ may lead to an unfortunate misappropriation. It may be that the higher-level is not so much being reduced as the lower-level is being enlarged. This is exemplified in scientific history with the development of sub-atomic physics which seemed to require an entirely new mode of science to be developed. Atoms were ‘reducible’ in a sense to constituent particles, but the behaviour of atoms did not directly correspond to the interactions of their constituents, which seemed to have a different set of governing principles. In terms of the question of evolutionary ethics, it may be then considered that sociobiology does not so much reduce morality to a proxy of genetics, but rather, enlarges our picture of the differential survival of genes. As McMullin writes in more general terms, “... reduction is not necessarily the simple shifting of epistemological and ontological weight from whole to parts that it is often assumed to be.”³⁰⁶ As such, there is no need to posit an ontological distinction between human nature and the physical chain of living matter, as John Paul II has; evolutionary theories, by examining the realm of human moral consciousness and interpreting it from a biological perspective, do not necessarily conflict with the truth of the dignity of the human person.

A further issue relevant to the idea of moral freedom in terms of reductive explanations of morality, is that such reductive explanations do not completely discount ‘emergence’. As contemporary theologians such as Willem B. Drees and Philip Clayton note, rhetoric usually portrays emergence and reductionism as sharply opposed.³⁰⁷ However, this is not necessarily the case. McMullin provides a more subtle and nuanced understanding. He roughly defines emergence as when a higher-level property is irreducible by the sciences governing the constituents from which it derives.³⁰⁸ Morality may be held as

³⁰⁶ Ibid., p. 311

³⁰⁷ Willem B. Drees, ‘Emergence and Reduction: The Same Coin?’, *Zygon: Journal of Religion and Science*, 48.2 (2013) p. 247, also, Philip Clayton, ‘Conceptual Foundations of Emergence Theory’, Philip Clayton and Paul Davies eds., *The Re-Emergence of Emergence: The Emergentist Hypothesis from Science to Religion*, (Oxford: Oxford University Press, 2006) p. 1

³⁰⁸ Ernan McMullin, ‘Biology and the Theology of the Human Person’, p. 312

an example of an emergent property; it is not wholly reducible to the sciences governing the constituents from which it derives, given the importance of human consciousness as discussed above. Morality's origin may be explained in terms of gene/group selection, but it is no longer completely governed by the factors from which it emanated. One prominent supporter of the notion of emergence in evolution is Gould; he rejects the idea that bodies could be considered as passive slaves of controlling constituents – a claim he feels is made by gene-selectionists.³⁰⁹ Therefore, even beyond the question of morality, the concept of emergence is held as a legitimate, if debated, aspect of evolutionary theory – for example, debate between Gould and Dennett.³¹⁰

McMullin points to the contemporary philosophical problem of consciousness (or the mind-body problem) as an exemplar of the “battlefield” between reductionism and emergence.³¹¹ Within this field, McMullin writes, one finds strong support for the claim that the realm of the mental is not reducible (in the narrow sense) by the sciences of the brain's constituents – though there would be disagreement depending on what interpretations of reduction and emergence were employed.³¹² With respect to morality, as an element of the mental realm, sociobiology can present coherent proposals which reconcile moral instincts with the principles of natural selection; they do so by explaining morality (a higher-level entity) in terms of its constituents. However, it was shown that such a reductive explanation merely postulates the reasons for the origins of morality, that is, to say nothing about its current function. Therefore, given that it cannot be fully explained in terms of its constituents, morality could also be considered an emergent property as its origins do not explain its current utility. Consequently, attempts to definitively categorise morality as either

³⁰⁹ Stephen Jay Gould, *The Structure of Evolutionary Theory*, (Massachusetts: Harvard University Press, 2002) p. 618

³¹⁰ See Daniel C. Dennett, *Darwin's Dangerous Idea*, p. 226, and Stephen Jay Gould, 'Darwinian Fundamentalism', *The New York Review of Books*, 44.10 (1997)

³¹¹ Ernan McMullin, 'Biology and the Theology of the Human Person', p. 313

³¹² *Ibid.*, p. 313

reductive or emergent are unnecessary, perhaps even futile; depending on the interpretation of these ambiguous terms, one need not fully discount the other.

From a more nuanced appreciation of reduction and emergence, the ontological continuity between humans and all other life, made known to us from the science of genetics and our shared DNA composition, does not diminish the reality of the human person. More particularly, genetic understandings of morality do not relegate it to the realm of nothingness; explanations of a property do not deny their existence. Theologian Arthur Peacocke recognises this concept; he states that new realities can emerge from the continuous process of evolution.³¹³ Morality, which is evident in humans and other animals, can be held as an archetypal example of a new reality which emerges; a new reality which is epistemologically irreducible, though ultimately reducible. This mode of understanding evolution will be argued throughout this thesis to be more scientifically accurate and more theologically defensible than attempts to postulate humanity as somehow ontologically separate. Sociobiological explanations for morality are concerned with reconciling evident behaviours with underlying scientific principles; they do not deny its clearly existent reality. Fears that explaining morality will erode the cherished dignity and moral freedom of the human person are therefore ultimately misplaced.

Given these three fallacies of the fatalistic interpretation of evolutionary ethics, a strong case can be made for the view that evolutionary ethics does not conflict with the idea of human moral freedom, which is intrinsic to Christian ethics as it is understood in this thesis – moral freedom will also be a central theme in Chapter Five. Evolutionary ethics does not lead one to the conclusion that humans are mindless drones being driven by their constituent genes. Therefore, a perceived conflict between evolutionary ethics and Christian ethics on the issue of free will is misplaced; sociobiological accounts allow for the idea of

³¹³ Arthur Peacocke, 'Biological Evolution – A Positive Theological Appraisal', Mary Kathleen Cunningham ed., *God and Evolution: A Reader*, (London: Routledge, 2003) p. 253

moral freedom which is essential for Christian ethics. In addition, it will be maintained in later chapters that evolutionary understandings of ethics provide hope in what may be otherwise understood as a nihilistic world.

2.4 Perceived Conflict with *Agape* and Neighbourly Love

Another perceived area of conflict between evolutionary ethics and Christian ethics as I understand it, is the notion of *agape* and neighbourly love. As discussed in section 2.1.2, *agape* and neighbourly love are unconditional; irrespective of a neighbour's gender, political affiliation, sexual orientation, etc., a neighbour is to be loved. Distant neighbours and even enemies are understood to be morally relevant. Two potential points of conflict can thus be discerned between evolutionary ethics and Christian ethics with respect to neighbourly love; Firstly, from the perspective of Christian ethics outlined in section 2.1, there should be a specific focus on the least advantaged, in a somewhat Rawlsian fashion (an idea particularly salient in liberation theologies). Evolutionary views on morality may conflict with the emphasis on the least advantaged given that in such a view, morality is ultimately derived from the principle of competition. Secondly, given that evolutionary ethics is ultimately 'selfish' and positively discriminates by degree of relatedness, it may be considered to conflict with the indiscriminate, boundless altruism of *agape*.

The first point of conflict could be evident when it is considered that evolutionary ethics has been promoted in the past as a socio-political doctrine aimed at 'improving' the human race. The principle of competition in evolution, if taken also as a principle of ethics, would seem to be in opposition to the ideas of a preferential option for the disadvantaged, *agape* and neighbourly love. Rather than placing the least fortunate as the concern of wider society, theorists such as Francis Galton, a first cousin of Darwin, proposed to implement measures aimed at preventing certain groups (who could be equated to the 'least fortunate')

from breeding, “preventing the free propagation of the stock of those who are seriously afflicted by lunacy, feeble mindedness, habitual criminality and pauperism....”³¹⁴ Herbert Spencer also produced a view that would seem to correlate to the principles of competition and contrast with a preferential option for the poor; he felt that the subordination of egoism to altruism would ultimately be detrimental to society and that indiscriminate charity would be demoralising³¹⁵ – of course in reading Spencer and Galton, we should be aware that they were writing in a specific context, and therefore, as philosopher Paul Thomson has argued, are often misrepresented and disproportionately criticised.³¹⁶

As a result of such theories, Ruse has argued that evolutionary ethics has “a (deservedly) bad reputation” because of the socio-political agendas of particular theorists.³¹⁷ Ruse interprets Spencer’s outlook as a metaethic which seeks to morally promote the evolutionary process, which progresses “from simple to complex, from amoeba to man, from... savage to Englishman.”³¹⁸ Ruse claims that the first theorists to begin to reflect on the ethical implications of evolutionary theory were led to the conclusion that we should be morally obliged to “let the weakest go to the wall.”³¹⁹ Such a perspective on our moral ‘ought’ saliently conflicts with a fundamental tenet of Christian ethics as understood in this thesis, which seeks not ‘send the weak to the wall’, but to promote a preferential option for the poor.

With regard to the second point of conflict, whether evolutionary ethics can be seen as contrary to the Christian idea of altruistic *agape*, Ruse elaborates and distinguishes between a weak and strong form of the Christian idea of neighbourly love; the weak version, defined as “One’s obligations are to be a good family man or woman, to be decent and kind

³¹⁴ Francis Galton, *Memories of My Life*, (London: Methuen and Co., 1908) p. 311

³¹⁵ Herbert Spencer, *The Principles of Ethics*, (New York: D. Appleton and Company, 1896) pp. 196-197

³¹⁶ Paul Thomson, ‘Evolutionary Ethics: Its Origins and Contemporary Face’, *Zygon: Journal of Religion and Science*, 34.3 (1999) pp. 446-447

³¹⁷ Michael Ruse, ‘Evolutionary Ethics: A Phoenix has Arisen’, *Zygon: Journal of Religion and Science*, 21.1 (1986) p. 95

³¹⁸ *Ibid.*, p. 96

³¹⁹ *Ibid.*, p. 96

to one's friends and acquaintances... and to be prepared to lend a hand to a stranger in need."³²⁰ The strong form of neighbourly love, however, extends the sphere of morally relevant individuals to include enemies. On this stronger Christian interpretation, Ruse suggests that conflict does indeed emerge between the two systems.³²¹ As noted in section 2.2, sociobiological accounts of altruism are generally premised on the question, 'for the benefit of who?' – kin, the group, the individual, etc. Evolutionary accounts of ethics posit that altruistic behaviour is justifiably discriminatory towards closer kin or groups, given that they are more likely to share genes. Moreover, in the case of reciprocal altruism (direct and indirect), altruistic behaviour would be discriminatory towards those who may reciprocate, or towards a society that may reciprocate, as opposed to 'cheaters' in such models. This discriminatory factor of evolutionary ethics seems opposed to the stronger representation of Christian indiscriminate and boundless love.

Errors in the Perceived Conflict with Agape and Neighbourly Love

On the first point of conflict between evolutionary ethics and *agape*/neighbourly love, the derivation of an ethical program such as Galton or Spencer's is not an evolutionary ethic as understood in this chapter. Rather, it is adopting a moral 'ought' from a scientific 'is'; using detached hyper-rationality over conscience to formulate moral decisions. On this point, Ruse endorses G.E. Moore's criticism of Spencer and Galton for committing the naturalistic fallacy; as Moore wrote, "These doctrines are those which maintain that the course of 'evolution' while it shews us the direction in which we are developing, thereby and for that reason shews us the direction in which we ought to develop."³²² David Hume had similarly forewarned about developing morals directly from reason, as he states, "Reason itself is utterly impotent in this particular. The rules of morality, therefore, are not conclusions of our

³²⁰ Michael Ruse, *The Darwinian Paradigm*, p. 262

³²¹ *Ibid.*, p. 264

³²² G.E. Moore, *Principia Ethica*, (Cambridge: Cambridge University Press, 1922) p. 46

reason.”³²³ Augustine too offered a similar view, perhaps one which could be considered a predecessor to Hume, as he expressed scepticism with regard to forming moral judgements based on reason alone.³²⁴

Notwithstanding such caveats, evolution may in fact offer some guide for ethical conduct; Singer’s views of the treatment of apes already mentioned section 2.2 is an example. Similarly, ethical systems that express particular concern for the biosphere have been advocated and grounded in evolutionary theory; Bron Taylor’s *Dark Green Religion* and Anna Primavesi’s *Sacred Gaia* are examples.³²⁵ Ruse also concedes that drawing ethical imperatives is not necessarily erroneous.³²⁶ However, drawing ethical stances from evolutionary theory is not of particular concern at this point. As outlined in section 2.2, I am taking evolutionary ethics as a model for understanding how moral behaviour may emerge from natural selection. This understanding of evolutionary ethics is essentially inconsequential with regard to specific moral issues – despite the fact that ethical imperatives have been taken from evolution. Evolutionary ethics provides a scheme for understanding how moral behaviour could evolve through the process of natural selection, but it is not an attempt to provide a scheme for how to be moral. A parallel could be drawn with the oft quoted expression, attributed to Galileo quoting sixteenth century Vatican librarian Ceasar Baronius, “*Spiritui Sancto mentem fuisse nos docere quomodo ad coelum eatur, non quomodo coelum gradiatur*” (the holy spirit teaches us how to go to heaven, not how heaven goes).³²⁷ Evolutionary ethics conversely, teaches us how morality becomes, not how one becomes moral – nor can it teach us whether what we understand as virtuous can

³²³ David Hume, *Treatise of Human Nature*, (Oxford: Clarendon Press, 1896) p. 457 [Originally published 1740]

³²⁴ Bonnie Kent, ‘Augustine’s Ethics’, Eleonore Stump and Norman Kretzmann eds., *The Cambridge Companion to Augustine*, p. 209

³²⁵ Bron Taylor, *Dark Green Religion: Nature, Spirituality and the Planetary Future*, (California: University of California Press, 2010) pp. 20-22, also, Anna Primavesi, *Sacred Gaia: Holistic Theology and Earth System Science*, (London: Routledge, 2000) pp. 15-23

³²⁶ Michael Ruse, *Evolutionary Naturalism*, p. 278

³²⁷ Also quoted by John Paul II, ‘The Emergence of Complexity in Mathematics, Physics, Chemistry and Biology’, *Papal Addresses to the Pontifical Academy of Sciences*, p. 342

actually be considered to have an *a priori* virtue, if such a thing even exists. Therefore, there is no conflict between my understandings of Christian ethics with regard to *agape* and neighbourly love and the evolutionary principle of competition.

The second point of conflict which may be perceived between evolutionary ethics and Christian ethics is whether evolutionary ethics has presented morality as ultimately selfish (for the benefit of one's genes, or group for instance), and thus contrary to the indiscriminate and boundless *agape* and neighbourly love of Christian ethics. Colin Grant makes this point as he notes that the morality of sociobiology does not fit the altruism of the Gospels; he feels that sociobiology "naturalises" altruism and does not fit the radicalism of Jesus' teachings.³²⁸ Yet this issue may be a semantic misunderstanding; in genetics, terms such as 'altruism' and 'selfishness' do not carry the same meaning as they do in traditional moral discourse. Peter Singer makes this point, as he explains that when speaking of biology, altruism and selfishness are consequentialist; they do not pertain to conscious motives. Singer explains that sociobiology's peculiar use of the term 'selfish' relates solely to whether or not actions maximise the number of descendants one has. These terms have nothing to do with motives, "they refer only to actual consequences of the individual's behaviour, whether or not the individual is motivated by or even aware of these consequences."³²⁹

This is a similar issue to the previously noted contention between Dawkins and Midgley regarding his use of analogical language. Sociobiology is not speaking of conscious selfishness but merely using such language as a heuristic method. J.L. Mackie also highlights this distinction as he follows the evolutionary understanding of morality, particularly as expressed in the work of Dawkins.³³⁰ Mackie emphasises that evolutionary

³²⁸ Colin Grant, *Altruism and Christian Ethics*, pp. vx-vxi

³²⁹ Peter Singer, *The Expanding Circle*, p. 129

³³⁰ J.L. Mackie, 'The Law of the Jungle: Moral Alternatives and the Principles of Evolution', *Philosophy*, 53.206 (1978) p. 455

explanations of morality are theoretical points of biology; they are not meant to be construed as ethical subjects in the traditional sense, nor are they offered as psychological frameworks.³³¹ Mackie refutes Midgley's argument that the 'selfish gene' concept leads to excessive egoism. Rather, he assures us, evolutionary ethics demonstrates how morality emerges from a mixture of biologically determined general tendencies and cultural traits, which lead to mixed behavioural 'strategies' between individuals.³³²

Moreover, again, the role of human consciousness is not taken into account in such critiques/perceived conflicts. Sociobiology, as it is presented by Dawkins, Dennett and others, clearly indicates that morality is not ultimately selfish; this would be to make the error of confusing origins with functions, as discussed in section 2.3.1. In sum, sociobiology, given that it acknowledges the powerful role of human consciousness and the differences between origins and functions, does not discount the genuine *agape* of the Christian message

2.5 Perceived Conflict with Natural Law

As outlined in section 2.1.3, natural law can be seen as an interplay between human reason and nature; that human reason helps to uncover an inherent moral law which is reflective of divine values. There could be a perceived conflict between this understanding of natural law and the field of evolutionary ethics given that natural law implies an objective moral code. On this point, Edward Wilson makes a sharp distinction between a natural law concept of ethics (which he terms transcendentalist) and his own sociobiological account (which he terms empiricist) – though I acknowledge here that Wilson's two options may not be the only ones available.³³³ Interestingly, Wilson points out that neither of these approaches are necessarily theistic or atheistic; a transcendentalist approach to ethics can be atheistic, whilst

³³¹ J.L. Mackie, 'Genes and Egoism', *Philosophy*, 56.218 (1981) p. 555

³³² *Ibid.*, p. 555

³³³ Edward O. Wilson, *Consilience: The Unity of Knowledge*, (New York: Random House, 1998) p. 261

an empiricist approach can be theistic (Wilson himself for example, identifies strongly as an empiricist with regard to ethics, but also as leaning towards deism).³³⁴ In any case, he outlines what he perceives as the two ‘options’ for ethical foundations, “*I believe in the independence of moral values, whether from God or not, versus I believe that moral values come from humans alone; God is a separate issue.*”³³⁵ A vision of natural law, as Wilson understands it, whether theistic or not, implies a self-evident set of moral principles, whereas an empiricist views ethics as conduct “favoured consistently enough throughout a society to be expressed as a code of principles.”³³⁶

An objective frame of reference against which behaviour can be deemed moral or immoral can possibly be signified as conspicuously absent from sociobiology, and thus a potential point of conflict between natural law and evolutionary ethics. It was noted in the previous chapter that the history of ethics can be contextualised substantially by a theocentric notion of an objective set of divinely instituted moral precepts. Evolutionary ethics however, is seemingly self-sufficient; it can explain morality without reference to a primordial covenant or divine ideal of the good. This apparent point of conflict has also been highlighted by Keith Ward, who feels that Christian ethics has a solid foundation or a metaethic akin to a Kantian sense of duties; there is a categorical, authoritative command to obey moral duties, a command which comes from God.³³⁷ Without this metaethic, sociobiology therefore cannot be an adequate framework for understanding morality, and as such, a perceived tension arises between sociobiology and natural law.

³³⁴ Ibid., p. 263

³³⁵ Ibid., p. 261 [italics in original]

³³⁶ Ibid., p. 262

³³⁷ Keith Ward, *Why There Almost Certainly Is a God: Doubting Dawkins*, (Oxford: Lion, 2008) p. 135

Errors in the Perceived Conflict with Natural Law

The oppositional model of natural law and sociobiology can be discredited when the strong parallels between the two systems are acknowledged. The political philosopher Larry Arnhart, for example, expresses the view that although we can rationally deliberate upon our plans for societal life, and prudently judge what to do in particular circumstances, our moral experience is not arbitrary; it is an expression of our nature.³³⁸ This conclusion can be taken from either Aquinas' natural law or sociobiology, thus demonstrating similarities between the two systems. Arnhart goes as far as to say that sociobiology belongs to the "tradition of moral naturalism that includes the idea of natural law as elaborated by Thomas Aquinas."³³⁹ Natural law and evolutionary accounts of ethics both specify a general structure of human morality, or at least postulate strikingly similar natural origins under the rubric of preserving human life and valuing offspring, though neither can adjudicate over disagreements in particular cases.³⁴⁰ Even stalwart sociobiologists would agree that their accounts of the origins of morality cannot indicate what is and what is not moral – though as noted above, evolutionary theories can and have been utilised to justify particular moral outlooks with regard to the environment and other issues. Aquinas and the sociobiologists both argue that morality has its origins in nature. Moreover, further similarities exist pertaining to the role of reason; Dawkins and Dennett, for example, are reminiscent of Aquinas in emphasising that conscious reason plays a key role in navigating moral decisions, despite acknowledging that we may have natural prejudices towards certain actions.

However, as theologian Stephen Pope rightly points out, there can be no simple synthesis between Thomas' ethics and evolutionary theory.³⁴¹ For this reason, Neil Messer

³³⁸ Larry Arnhart, 'Darwinian Conservatism as the New Natural Law', *The Good Society*, 12.3 (2003) p. 19

³³⁹ Larry Arnhart, 'The Darwinian Moral Sense and Biblical Religion', Philip Clayton and Jeffery Schloss eds., *Evolution and Ethics: Human Morality in Biological and Religious Perspectives*, p. 204

³⁴⁰ *Ibid.*, p. 18

³⁴¹ Stephen J. Pope, *The Evolution of Altruism and The Ordering of Love*, (Washington D.C.: Georgetown University Press, 1994) p. 77

critiques Arnhart's marrying of sociobiology and natural law as too simplistic.³⁴² In spite of this caveat, Pope does acknowledge that functional equivalencies can be identified between the two systems.³⁴³ For example, natural law as it is understood here, is an interplay between human reason and an innate morality in nature. Similarly, sociobiology suggests that a morality arose in nature, and subsequently, human reason took a prominent role in our categorising behaviour as moral or immoral. As Pope writes, Thomas' ideal of love is an "integral personal response *ordering* and *incorporating* the appetites as well as the intellect."³⁴⁴ Consequently, it is clear that given these functional equivalencies, there need not be direct conflict between the natural law of Christian ethics and evolutionary ethics; much to the contrary, there are in fact deep similarities.

Despite these similarities and parallels, it could still be argued that in reconciling sociobiology with natural law it is necessary to excise the theological element from natural law. Philosopher Craig Boyd has stressed this point; that theologians who seek to reconcile the two systems are distorting Aquinas' ethics to make natural law palatable to sociobiologists.³⁴⁵ Boyd is correct in stating that the sociobiologist or ethical empiricist does not need to appeal to God in their explanations of morality. Wilson, for example, favours "a purely material origin of ethics."³⁴⁶ However, this highlights another relevant theological/philosophical concept, namely, the idea of explanatory pluralism; varying explanations for a given phenomena can coexist without being in direct conflict with one another. Unless two explanations are demonstrably shown to conflict, then there is no *a priori* reason for discounting one.³⁴⁷ It can be argued then that phenomena may have a

³⁴² Neil Messer, *Selfish Genes and Christian Ethics*, p. 118

³⁴³ Stephen J. Pope, *The Evolution of Altruism and The Ordering of Love*, p. 77

³⁴⁴ *Ibid.*, p. 57 [italics in original]

³⁴⁵ Craig A. Boyd, 'Was Thomas Aquinas a Sociobiologist? Thomistic Natural Law, Rational Goods, and Sociobiology', *Zygon: Journal of Religion and Science*, 39.3 (2004) p. 668

³⁴⁶ Edward O. Wilson, *Consilience*, p. 263

³⁴⁷ This argument may be slightly vulnerable to criticism regarding the burden of proof, as put forth by Bertrand Russell and others, in that one would not be burdened with the task of disproving a given explanation. Bertrand Russell, 'What is an Agnostic?', *The Basic Writings of Bertrand Russell*, p. 557 [Originally published 1953]

plurality of explanations of equal authority; a teapot boils because a person wants a cup of tea, or because a person turned on the stove, or because the molecules of water are escaping as the water heats. Returning to E.O. Wilsons' demarcation between two 'options' for a grounding of morality (transcendentalist or empiricist), acknowledging the possibility of explanatory pluralism may suggest that it is not an either/or situation. A number of contemporary theologians engaged in the science – religion dialogue adopt this method of understanding, for example, John Haught and John Polkinghorne (who both use the teapot analogy).³⁴⁸ In this view, sociobiology, despite not directly appealing to God, does not discount the theological element of natural law; elements of natural law that are not distinctly theological seem to coalesce reasonably well with the principles of sociobiology.

On the issue of a metaethic then, is there a possibility of a synthesis between evolutionary ethics and natural law on the issue of an objective morality? Even if there are similarities between the two systems, understanding morality as having evolved may depict it as inherently subjective, given that by definition it has originated as a result of biological processes; had these biological processes been different, surely our moral outlook (and indeed, much else) would be different. Ruse illustrates this point by postulating the existence of extraterrestrials – for the sake of argument I assume he is conceiving of extraterrestrials of a similar intelligence and who hold whatever other criteria we may use to classify one as a moral agent. He suggests that if such extraterrestrials had different biological characteristics, then perhaps they would have different moral outlooks on something such as rape.³⁴⁹ He suggests that, "... we cannot automatically assume that our extraterrestrials would think rape immoral."³⁵⁰ Although Ruse himself makes a number of other points in relation to this discussion, I raise this issue to illustrate that if our morality is in some senses

³⁴⁸ John Haught, *Christianity and Science: Toward a Theology of Nature*, (New York: Orbis, 2007) p. 142; also, John Polkinghorne, *Quarks, Chaos and Christianity: Questions to Science and Religion*, (London: Triangle, 1994) p. 15

³⁴⁹ Michael Ruse, *The Darwinian Paradigm*, pp. 234-237

³⁵⁰ *Ibid.*, p. 235

dependent on our biological heritage, then our morality is inherently subjective and could have been otherwise, as it is for Ruse's hypothetical extraterrestrials. Hence, subsequent to reflecting upon our evolutionary history, we realise that perhaps a Platonic good is a redundant notion. This point, as noted above, was where Ward and others took issue with sociobiology, and thus felt the need to maintain a more traditional approach; a divinely instituted morality.

Despite the fact that morality has evolved and is dependant on our evolutionary heritage, its reality is not diminished – recall the sentiment of the emergent approach discussed above. The same could be said of moral objectivity; there may not be, as Ruse's extraterrestrial example illustrates, an *a priori* ethical objectivity inherent in the evolutionary process. Yet this does not necessarily discount an objective standard for morality. As John Rawls suggested, humanity can develop a system of a basic structure of justice; a social notion of objectivity.³⁵¹ Willem B. Drees draws upon Rawls in this regard to suggest that a social establishment of a standard of justice can be “a valuable complement to and corrective of our ethical intuitions as rooted in our biology. Ethical objectivity need not be linked to a realm of ethereal entities such as abstract values.”³⁵² As a result, in addition to the functional equivalencies, it can be argued that evolutionary understandings of ethics could mirror natural law in that they both portray human reason reflecting upon human nature and uncovering/constructing a moral standard – which reflects divine values in a theological interpretation.

There are, of course, at least two distinctions to be made when comparing the moral objectivity of natural law, and the moral objectivity as it is described in the Rawlsian standard of justice. Firstly, the Rawlsian standard of justice is not *a priori*; it can hardly be equated to the Eternal law of Aquinas' thought, given that it emerges from the evolutionary

³⁵¹ John Rawls, *A Theory of Justice*, p. 3

³⁵² Willem B. Drees, *Religion and Science in Context: A Guide to the Debates*, (London: Routledge, 2010) p. 128

process and subsequent reflection upon biological imperatives. That being acknowledged, a Rawlsian *posteriori* appreciation of morality may actually be incorporated into a revised theological framework, such as will be advocated in later chapters.

The second distinction is that, as Rawls himself acknowledges, “There is no reason to suppose ahead of time that the principles satisfactory for the basic structure hold for all cases.”³⁵³ Thus, one could question how objective Rawls’ basic structure actually is. This caveat is also dutifully acknowledged by Aquinas, when considering moral precepts of the law of nature, “... one may proceed in various ways to judge of various matters.”³⁵⁴ Even in Aquinas’ vision of natural law then, subjectivity is acknowledged. Morality is not seen in either natural law or sociobiology as understood here to be fully objective or fully subjective; in adopting either view (or indeed, both), one can maintain that some objectivity is possible. Moreover, this objectivity is discerned through the interplay of human reason and nature. So whilst it is not contested that evolutionary ethics and natural law are identical, the similarities do suggest that they are at least not in conflict. Consequently, a perceived conflict between Christian ethics and evolutionary ethics on the issue of natural law can be argued to be resting upon weak foundations.

2.6 Conclusion

The underlying motivations and levels of Christian ethics and evolutionary ethics as I understand them are indeed different; Christian ethics is primarily concerned with developing a schema for employment in the real world as a guide for how people ought to live (the principles of *agape*, neighbourly love and a preferential option for the poor, for example). That being said, it is also concerned with a philosophical metaethic from which subsequent moral discourse can emerge (the concept that an ethical ideology has been

³⁵³ John Rawls, *A Theory of Justice*, p. 7

³⁵⁴ Thomas Aquinas, *Summa Theologica: I-II*, 100.1

divinely revealed through Christ, or through natural law, for instance). Evolutionary ethics is not as concerned with making moral statements; its focus is an understanding of how ethics came to be, though again this is not to suggest that evolutionary theory cannot be employed to lend credence to or indeed rebuke moral statements (for example, pertaining to human attitudes to the biosphere). In this chapter, the two systems were compared in order to show that one does not supersede the other; evolutionary understandings of ethics can co-exist with Christian ethics. Arguments have been presented (such as those by Midgley and John Paul II, among others) which suggest that human morality is (at least in part) beyond the remit of explanation by the natural sciences. However, it was argued in this chapter that evolutionary theory does provide insight into the origin and nature of human morality, and moreover, that these insights do not conflict with Christian understandings of ethics.

To illustrate this, an understanding of what is meant by ‘Christian ethics’ was outlined in section 2.1, explicated in terms of three key motifs; moral freedom, *agape* and neighbourly love, and natural law. Furthermore, an understanding of evolutionary ethics was then outlined in section 2.2 – this was understood in terms of the theories/conclusions of sociobiology with regard to the questions of the origin and nature of human morality (of course noting that sociobiology in general is concerned with wider-than-human behaviour, and wider-than-moral behaviour). Perceived conflicts between these insights of sociobiology and the three tenets of Christian ethics as I understand them were then considered in sections 2.3-2.5. Whilst potential conflicts may be discerned between evolutionary ethics and each of these three aspects of Christian ethics, I argued that upon a proper reading of sociobiology that had a nuanced appreciation of reductionism/emergence and fully acknowledged the important role of human consciousness, these perceived conflicts were ultimately specious; they were based upon misreadings or narrow interpretations of the key themes of evolutionary ethics. Consequently, a strong case is made for the compatibility of Christian

ethics and evolutionary ethics; even if they cannot be neatly consolidated, they are not in conflict. This allows me to advance the argument of this thesis further which will demonstrate how evolutionary ethics can influence a Christian theological worldview and provide a glimmer of hope. Before this argument reaches its culmination, it will be evidenced in the next chapter how theology can be re-shaped in light of evolutionary theory, thus providing a theological worldview which is more amenable to evolutionary ethics than traditional worldviews such as those explored in the previous chapter.

CHAPTER THREE:

AN EVOLUTIONARY THEOLOGICAL METAETHIC

3.0 Introduction

The first chapter dealt with a ‘traditional’ framing of good and evil within a theological context which was heavily influenced by Augustine; the image of God having created a perfect world and instilling in it moral rubrics subsequently neglected by humanity. The second chapter then, in part, dealt the approach to good and evil as explicated by sociobiologists in light of their attempts to reconcile Darwinian principles with altruistic behaviour. Whilst it was argued that such sociobiological appreciations of morality do not fully discount the theological understandings explored in Chapter One, there are aspects of such understandings that require revision in light of evolutionary theories of morality. For example, the traditional narrative understood goodness as an intrinsic element of creation, and thus, evil was a conspicuous feature of the world which demanded explanation. Evolutionary explanations of ethics reverse this demand, by demonstrating the principles of struggle evident in evolution and questioning the origins of good. As such, this asymmetrical shift must become an important element in a revised theological appreciation of ethics and good/evil.

Sociobiological theory therefore, provides significant motive for constructing a coherent metaethic which definitively supplants the concept of a ‘golden age’ of goodness which humanity is trying to recover. A reframing of the asymmetry in traditional searches for the cause of evil is needed; evil did not enter the world through a primordial misdeed, as with Augustine’s hermeneutical representation of the fall, but only gained intelligibility as a concept itself in the evolution of morality, or in a more anthropocentric view, with the

evolution of human moral consciousness. The traditional understandings of the fall maintain some merit in light of evolution – for example, our understandings of the evolutionary principle of competition might lend scientific credence to the aspects of original sin which view humanity as destined for evil – if evil is equated with selfishness (see section 1.1). However, as an overarching metaethic the traditional fall narrative fails on the issue of a primordial good. Thus, there is a need to shift away from traditional understandings of the fall in light of sociobiology.

The crux of this chapter therefore, is to outline a theological approach which appreciates the need for a paradigm shift with respect to the framework of good and evil. Such a paradigm shift will be largely (though not wholly) attributed to our growing appreciation of evolutionary theory. Contributions towards such a shift in worldview have been made by a number of scholars in modern theology. Particularly with regard to theologians engaged in the theology-science dialogue, there is a discernable tendency to now envisage the world as developing rather than having been created perfect; a move from the concept of *creatio ex nihilo* to *creatio continua*, in line with our understanding of the ongoing process of evolution. However, specific problems and issues within this shift can be identified, which lead me to suggest that particularly pertaining to a metaethic, such a theological approach needs further reflection and refinement. Consequently, this leads me to pose four distinct criteria which much be addressed in a theological worldview appreciative of evolutionary ethics; i) it appreciates the evolving nature of the world, the evolving nature of goodness, and the evolving nature God's creative action ii) it makes reference to the divine, iii) it provides a response to the theodicy question, and iv) it appreciates our present responsibilities.

Section 3.1 will demonstrate that sociobiology has influenced theologians such as Neil Messer and Patricia Williams to discard the traditional notion of goodness being an

intrinsic element of creation. I will then argue that sociobiology actually offers a replacement of sorts for our understanding of the origins of good and evil; they only became intelligible with the evolution of morality. Only when the ability to reflect upon right and wrong (which is, it is maintained, a characteristic only humans possess) can actions be considered morally good or morally evil. This is in contrast to the traditional conceptual scaffolding of a preordained good which human moral reflection was then measured against. Therefore, the sociobiological account of the knowledge and causal origin of ethics arguably has a significant impact on the conceptual status of ethics, i.e. whether ethics can transcend its context; if morality (that is beyond the altruism evident in other animals) only emerges with humanity, then is morality inherently anthropocentrically subjective? – this issue was also addressed section 2.5.

In contrast to the vision of an instantaneous creation, section 3.2 will then explore how certain theologians have altered their interpretation of God's creative action in light of our evolutionary understanding. The third section of this chapter, section 3.3, will then explore proposals for an eschatologically focused theology in light of evolution; the view that evolution is progressing towards a specific goal, namely, a divine Omega. On this issue, theological appropriations of evolution may not be able to derive explicit support from evolutionary theory, as evolution is not understood as goal-oriented; Gould stressed this point in his popular metaphor of winding back the tape of life and letting it run again, and the unlikely possibility that anything like humans would reappear.³⁵⁵ This raises the issue of teleology, which will be also be discussed in this section. In contrast to theologians who draw upon interpretations of evolution which signal some form of teleology, it will be contested in this section that conscious teleology emerges only with the evolution of the moral sense and is not *a priori*. Notwithstanding, the developmental aspects of such

³⁵⁵ Stephen Jay Gould, *A Wonderful Life: The Burgess Shale and the Nature of History*, (London: Vintage, 1990) p. 51

eschatological or teleological theologies are worth noting. Sections 3.1-3.3 therefore, deal with the first criterion set forth above; appreciating the evolving nature of the world, the evolving nature of goodness, and the evolving nature of God's creative action.

With respect to the emphasis on ongoing development in sections 3.1-3.3, the question of how the divine is reflected in this framework becomes apparent. If the divine is not reflected in the direct design of life and the world, as with William Paley's argument from design and other notions of an instantaneous creator, then it needs to be asked how the divine is reflected, if at all, in an evolutionary or developmental worldview. Section 3.4 will address this question and follow John Haught in referring to Paul Tillich's idea of God as depth, thus responding to the second criterion set forth above. Section 3.5 will then expound on how a developmental or evolutionary view can provide a response to the theodicy question – as required by the third criterion. It will then be discussed in section 3.6 how the shift in theological understandings of the world, which stem largely from evolutionary theory, can be appreciative of present moral responsibilities. In this section, it will be argued that an immanent model of God, such as that explored in section 3.4, coupled with evolutionary ethics, provides reasoning for acknowledging present ethical imperatives, as required by the fourth criterion. Section 3.6 will then outline how the respective themes raised in the chapter culminate to satisfy the four criteria outlined.

3.1 A Shift in the Framework for Understanding Good and Evil

Evolutionary accounts of ethics demonstrate that moral behaviour as manifest in humans has arisen after an immensely long period of time, like all other features of the biosphere. As a result, contrary to the traditional image of divinely created perfection, goodness has only recently emerged in evolutionary history. It follows therefore, that the universe underwent a vast period of moral indifference (save to the extent of potentially moral extraterrestrials and

again distinguishing between morality and functional altruism); the universe was originally amoral. The traditional portrayal of the biblical narrative begins to buckle as a framework for understanding good and evil when this realisation is taken into account. As discussed in Chapter One, the Augustinian answer to the theodicy problem, postulating that humanity turned its back on a created perfection, no longer seems adequate in light of the evolutionary view. This forces a substantial reframing of theological understandings of the good and evil; goodness enters the world at a much later stage than originally assumed by Augustine and his followers.

This realisation recalls a key issue for theological conceptualisations of the world; namely, the subjectivity of goodness (also discussed in the previous two chapters). If goodness was not as once thought, instilled as a steadfast and ontologically objective set of moral precepts, then it leads one to ask how we come to know the good and whether our knowledge of the good reflects any underlying moral framework. Of course, it has been common to reject this implication of sociobiology. Theologians such as Keith Ward (noted in the previous chapter) and John Haught insist on the need for an objective, underlying morality in nature that reflects the will of God.³⁵⁶ Our knowledge of this underlying morality, in the views of Ward, Haught and other like-minded theologians, comes from revelation – specifically in their context, from reflection on the Christian scriptures. As such, there is a type of moral frame of reference against which behaviour can be assessed; a frame of reference they feel is missing from purely sociobiological accounts.

Against their apprehensions regarding sociobiological accounts of ethics, it is contested in this thesis, that rather than being deficient of a moral frame of reference, sociobiological accounts actually provide an indication of the good; evolutionary explanations of ethics offer a glimmer of hope/goodness, they show a crack in the surface of

³⁵⁶ John Haught, *Making Sense of Evolution: Darwin, God, and the Dream of Life*, (Kentucky: Westminster, 2010) p. 119

what otherwise seems a nihilistic world (this theme will be explored in greater detail in the next two chapters). As argued in the previous chapter, sociobiological accounts of ethics do not diminish their significance nor deny their metaphysical reality. It can be through evolutionary ethics that we come to know the good. From a Christian context this could be immediately critiqued as making Christian revelation redundant and adopting what theologian Alistair McFadyen terms a ‘pragmatic atheism’ where reference to God makes no difference in how one acts.³⁵⁷ However, it will be argued later that Christian ethics could be understood as a manifestation of the good to which nature points. Here, I follow Neil Messer in drawing (loose) parallels between evolutionary accounts of ethics and Karl Barth’s appreciation of sin.³⁵⁸

Barth is critical of humanity’s attempts to comprehend sin and provide for itself criteria to become its own law-givers, accusers and judges.³⁵⁹ For Barth, the human quest to distinguish between good and evil is an element of the sin of pride – perhaps it could also be equated to an element of the innate want for more in Rousseau’s *amour propre*, or Augustine’s original sin. Barth suggests that our perceived knowledge of good and evil is merely self-deception and delusion, which results in us eschewing the good and doing evil.³⁶⁰ True knowledge of good and evil in Barth’s view is beyond the scope of human comprehension. He then argues that it is only through knowledge of Christ that we “really know that man is the man of sin, and what sin is, and what it means for man.”³⁶¹ Barth can find support for his view in the biblical narrative. The pervading traditional representation of good and evil, as discussed, originates in Augustine’s portrayal of the fall from paradise. However, a closer analysis of the scriptures indicates that the fall plays a relatively minor

³⁵⁷ Alistair McFadyen, *Bound to Sin: Abuse, Holocaust and the Christian Doctrine of Sin*, (Cambridge: Cambridge University Press, 2000) p. 8

³⁵⁸ Neil Messer, *Selfish Genes and Christian Ethics*, p. 165

³⁵⁹ Karl Barth, *Church Dogmatics: IV.1*, pp. 388-389

³⁶⁰ *Ibid.*, p. 453

³⁶¹ *Ibid.*, p. 389

role – this was noted in Ricoeur’s exegesis in section 1.4. In the scriptures, it is only after Christ that Adam gains his significance as the culprit of original sin; it is only in comparison to the good of Christ that the sin of Adam becomes explicitly known. In less allegorical terms then, this corresponds directly with Barth’s assertion that it is only through the goodness of Christ, that sin or evil can be understood. Similarly, in sociobiological terms, it is only with the evolution of goodness/morality that discussion of evil/sin is intelligible. Thus, the biblical narrative reflects the introduction of moral awareness through the origins of good, manifest in Barth’s view with Christ.

Barth should be critiqued here, though, in terms of the broader dialogue between theology and the sciences. Such a resolutely Christ-centric appreciation of good and evil is inadequate in this broader setting. Messer, despite being explicitly supportive of Barth, acknowledges this point. He notes that attempting to affirm a cosmic and universal salvation through Christ can seem a “scandalous thing to say in a pluralist world.”³⁶² However, the parallel could still be drawn, that it is only after goodness emerges that any sense of good and evil enters our ontological picture of the world. If we learn from evolutionary theory that there was no created perfection where goodness was established, then there must have been a transitional period or point where goodness enters – again, if goodness is taken to only be fully intelligible in light of humanity or indeed other hypothetical morally reflective beings. At this point, the world ceases to be amoral. Barth identifies this as the Christ event; thereafter, a true understanding of good and evil can transpire. A broader understanding appreciative of evolutionary ethics could in parallel assert that only after the point where human morality emerges, can an understanding of good and evil transpire. This is not necessarily to suggest that there was no animal sin/suffering before human morality evolved, but rather, that our unique appreciation of morality – what Darwin felt was the most

³⁶² Neil Messer, *Selfish Genes and Christian Ethics*, p. 211

important distinguishable trait of humans – allowed for a full realisation of what we now consider as good and evil, right and wrong.³⁶³

Messer, following from Barth, then suggests that Darwin and his sociobiologist heirs perform the role of ‘masters of suspicion’.³⁶⁴ Messer proposes that evolutionary accounts of ethics have helped to unmask our human pretensions regarding our knowledge of good and evil. Therefore, he feels, sociobiology can assist theology in developing a “more trustworthy foundation on which our moral life may be built.”³⁶⁵ The scientific theories which underpin sociobiology offer theology a more reasoned vantage point to develop a moral framework; it helps theology engage in what Dietrich Bonhoeffer calls the first task of Christian ethics, namely, to invalidate our perceived knowledge of good and evil – though Bonhoeffer still presents humanity as “falling away” from God.³⁶⁶

The cardinal point here, is that our knowledge of good and evil can no longer be understood as instilled in a primordial creation. Rather, it enters much later, after the good has evolved or in Barth’s view, is brought through Christ. Good and evil enter the world then, relatively recently. The position defended here, is that it is through the evolution of morality that good becomes intelligible. In some respects, this echoes Spinoza’s objections to the theodicy problem stated in Chapter One; it is only in relation to human senses that anything is considered evil – there is no Platonic idea of evil independent of human minds. Moral good and moral evil exist as a result of evolved behavioural traits as explored through sociobiology; only with human consciousness can altruism transcend its behaviouristic functionality and really be considered moral. Representations of an archaic covenant or social contract seem too blunt to be consistent with what we learn from sociobiology. Notwithstanding, as argued in the previous chapter, this does not diminish the reality or

³⁶³ Charles Darwin, *The Descent of Man*, p. 63

³⁶⁴ Neil Messer, *Selfish Genes and Christian Ethics*, p. 172

³⁶⁵ *Ibid.*, p. 172

³⁶⁶ Dietrich Bonhoeffer, *Ethics*, trans. Neville Horton Smith, Eberhard Bethge ed., (New York: Touchstone, 1995) p. 21 [Originally published 1949]

significance of moral values. Moreover, as will be discussed in section 3.4, our evolved sense of moral values can still be viewed as a reflection of the divine.

A similar position has been defended by Patricia Williams, though she is more concerned with the nature of morality (i.e. whether or not there is a normative morality evident in nature) than with its origins. Williams offers a critique of Christian ethics, when such ethics are premised by the notion of an inherent goodness in nature – what she understands as a natural moral law. She feels that such visions of morality are far too simplistic, as sociobiology indicates that some aspects of ‘nature’s way’ are deemed sinful (e.g. polygamy), whilst others are deemed good (e.g. altruism).³⁶⁷ The distinct caveat mentioned in the previous chapter again emerges here, which relates to the complexities of natural law and the subsequent difficulties in making any definitive statement about it; as Stephen Pope writes, Aquinas’ work has always been discussed selectively.³⁶⁸ However, this caveat conversely strengthens Williams’ stance, as it is the over-complexity of relations between sociobiology and natural law that for her, prevents there being any cohesion. In this sense, her view differs in nuance from that of Pope and Arnhart in the previous chapter. The position defended in this thesis does coalesce with Williams by pointing out that sociobiology “disproves” a simplistic vision of morality as innate in nature.³⁶⁹ Consequently, there is clear evidence of a need for a shift in thinking of good and evil as innate concepts created with the world. Furthermore, as seen in the writings of contemporary theologians such as Messer and Williams, this shift is in part catalysed by evolutionary ethics.

³⁶⁷ Patricia Williams, *Doing Without Adam and Eve: Sociobiology and Original Sin*, (Minneapolis: Fortress, 2001) p. 156. It should be noted that whilst Williams interprets sociobiology as promoting polygamy, others such as Stephen Pope have suggested the opposite; that natural selection favours monogamy. Stephen Pope, *The Evolution of Altruism and the Ordering of Love*, pp. 86-87

³⁶⁸ Stephen Pope, *The Evolution of Altruism and the Ordering of Love*, p. 159

³⁶⁹ Patricia Williams, *Doing Without Adam and Eve: Sociobiology and Original Sin*, p. 156

3.2 The Shift In Understanding God's Creative Action

Traditional understandings of God-as-Creator envisage a creation event, and thereafter, a God who maintains direct involvement with the world, usually through miracles. This is, of course, somewhat of an oversimplification and there are important texts which are exceptions to the more common Christian representations of creation.³⁷⁰ Indeed, Augustine's own reading of Genesis was far more nuanced than proposing an instantaneous or hexaemeral (six-day) creation. Augustine astutely differentiated between the "Let there be..." and the "Let the... bring forth..." – the "Let the... bring forth..." representing a less stringently instantaneous creative action. As Ernan McMullin states, through this distinction Augustine had discussed a developmental understanding of creatures and humans' coming into being long before Darwin.³⁷¹ Furthermore, according to McMullin, it was only since the sixteenth century that a literal interpretation of Genesis became popular.³⁷² Despite noting these points, the developmental nature of evolutionary theory has still spawned the need for a reconsideration of how God creates and acts. In this respect, there has been a discernable shift in certain theologians' thinking towards viewing God as creating and acting through or with the laws of nature (perspectives on divine action will be explored in greater detail in the next chapter). In contrast to envisaging God's creative action at the beginning, there has been a discernable shift among certain scholars towards viewing God's creative action as ongoing; a point which has been presented as an eschatological view, as will be explored in the next section.

In an originally unpublished essay of 1920, Pierre Teilhard de Chardin considers the traditional way of understanding God's operative activity in the world as a dominant causality among other causalities, "a force interpolated into the series of experiential

³⁷⁰ For an overview of such exceptions, see Irish theologian James P. Mackey, *The Scientist and the Theologian: On the Origin and Ends of Creation*, (Dublin: Columba, 2007) pp. 12-33

³⁷¹ Ernan McMullin, 'Darwin and The Other Christian Tradition', *Zygon: Journal of Religion and Science*, 46.2 (2011) pp. 296-306

³⁷² *Ibid.*, pp. 303-306

forces.”³⁷³ He states that although this image of God’s action has been often “more or less unconsciously accepted”, it is a rudimentary understanding which cannot be taken as it stands.³⁷⁴ Teilhard uses the analogy of a sphere packed with a large number of springs to represent nature’s causality – each spring represents a causality and impacts on other springs. He envisages the traditional notion of God as another spring, though one which is more dominant; God is a causal force, in the same way that Peter or Paul were causal forces.³⁷⁵ In this representation, God acts in particular events in nature. However, Teilhard is discontent with such a view. He proffers another way in which to view God’s action, “A first, and peculiarly divine, way by which the First Cause can affect lower natures consists in its ability to act *simultaneously on their whole body*.”³⁷⁶ Rather than acting on specific events, Teilhard views God as acting on all events at the same time. In his analogy of the sphere of springs, Teilhard imagines God as “exerting so skilful a pressure over the whole of the surface of the system at once that it can, infallibly, produce whatever modification it wishes at any point inside the sphere.”³⁷⁷

From this vantage point, Teilhard sees God as acting through nature, as opposed to *contra naturam*, as in the more traditional perspective of miraculous events. Teilhard thus suggests that God is active where we “see only the work of nature.”³⁷⁸ This is not quite to suggest that Teilhard was proffering a pantheism of sorts – indeed such compartmentalising of thought patterns may take us too far away from the discussion at hand, although in recent years there has been some interesting discourse regarding how models of divine action through nature could be expressed and categorised.³⁷⁹ Interestingly, though, Teilhard does himself raise the issue of pantheism and reflects positively upon its concern with viewing

³⁷³ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 25

³⁷⁴ *Ibid.*, p. 25

³⁷⁵ *Ibid.*, p. 25

³⁷⁶ *Ibid.*, p. 26

³⁷⁷ *Ibid.*, p. 26

³⁷⁸ *Ibid.*, p. 27

³⁷⁹ For example, see Philip Clayton and Arthur Peacocke eds., *In Whom We Live and Move and Have Our Being*, (Cambridge: William B. Eerdmans, 2004)

the world as “the Whole”; this admiration of pantheism was in contrast to the widespread association of such philosophies with paganism and anti-Christianity at the time of writing.³⁸⁰ In any case, what is evident in this aspect of Teilhard’s writing is the shift away from an ancient and instantaneous creation, which God later intervenes in, and towards the recognition of a more intrinsic relationship between the divine and the natural. As such, Teilhard is in a certain sense, presupposing a natural approach to theology; again, a theme which will be analysed in the next chapter.

As it pertains to the topic of evolutionary theory, Teilhard is explicit in stating that our scientific study of the universe and humanity is indicative of an evolutionary process.³⁸¹ Consequently, Teilhard sees God as working through the processes of evolution, of which, it is maintained in this thesis, evolutionary ethics is an important element. Teilhard’s understanding of the God-world relationship thus catalyses him to propound on the nature of God’s creative action. In line with evolutionary theory, and in contrast to the view of a Creator who completed heaven and earth with all their array³⁸², Teilhard envisages an ongoing, evolving creation. He seeks to realise the presence of the divine current running beneath the causal nexus of the world; to comprehend “creative transcendence through evolutive immanence.”³⁸³ Such a vision of creation is in stark contrast to the traditional representations of a perfect creation as extrapolated from the Genesis narrative.

Whilst there are various idiosyncrasies with regard to particular perspectives on divine creative action, some of which will be explored in the next chapter, a shift in thinking regarding God’s creative action is also present in a number of more recent scholars; that is to say, despite significant differences, there is an evident shift in contemporary theology towards viewing God as continually creating through the physical laws. Teilhard’s theology,

³⁸⁰ Pierre Teilhard de Chardin, *Christianity and Evolution*, pp. 59-64

³⁸¹ *Ibid.*, p. 29

³⁸² Such as that stated by Pius XII, ‘Man Ascends to God by Climbing the Ladder of the Universe’, *Papal Addresses to the Pontifical Academy of Sciences*, p. 81

³⁸³ Pierre Teilhard de Chardin, *Christianity and Evolution*, pp. 59-64

as we shall see, still offers a blueprint for modern theologians' approach to evolution and as such, his work has been held as a prominent example of a revised approach to considering God's action, but there are others. Arthur Peacocke, for example, proposes a view which envisages God acting through what he calls 'whole-system causation'; God acts upon the whole of the universe and thus influences events from the top down.³⁸⁴ Peacocke acknowledges that in light of evolutionary theory, the temporal framework which shaped Judeo-Christian religious beliefs now has to make way for an image of God continuously creating.³⁸⁵ Concurrent endorsements of a continuing creation can be found with Ian Barbour and others.³⁸⁶ The theologian Robert John Russell, for example, explains that "an increasing number of theologians working to appropriate a scientific perspective seem to agree on the emerging vitality and importance of *creation continua*."³⁸⁷ An ongoing creation is also a key theme of process theology, based upon the philosophies of Alfred North Whitehead and Charles Hartshorne.³⁸⁸ Consequently, there is evidence of a shift in theological worldview away from the traditional image of an instantaneous (or at least hexaemeral) created perfection. However, a continuous creation may still be considered haphazard, aimless or with no particular goal. On this point, there has been a marked emphasis on viewing this continuing creative process as teleological and eschatological.

3.3 The Shift Towards an Eschatological View

Teilhard sought to outline an ontological vision which is reflective of the evolutionary nature of the living world as we have come to know through evolutionary science. Therefore, he suggests a shift from the traditional tendency to look back to God at the

³⁸⁴ Arthur Peacocke, *Paths from Science Towards God: The End of all our Exploring*, (Oxford: Oneworld, 2001) pp. 109-110

³⁸⁵ *Ibid.*, pp. 65-67

³⁸⁶ Ian G. Barbour, *Religion in an Age of Science*, (London: SCM, 1990) p. 181

³⁸⁷ Robert John Russell, *Cosmology from Alpha to Omega: The Creative Mutual Interaction of Theology and Science*, (Minneapolis: Fortress, 2008) p. 35

³⁸⁸ See John B. Cobb Jr. and David Ray Griffin, *Process Theology: An Introductory Exposition*, (Belfast: Christian Journals, 1977)

beginning, and look towards God as the future; he proposes an eschatological focus for theology:

Ever since Aristotle there have been almost continual attempts to construct ‘models’ of God on the lines of an outside Prime Mover, acting *a retro*. Since the emergence in our consciousness of the ‘sense of evolution’ it has become physically impossible for us to conceive or worship anything but an organic Prime-Mover God, *ab ante*.³⁸⁹

There is therefore, a decisive shift evident in his thinking, from the idea of God as Alpha to an eschatological vision of God as Omega – biblical support for such an Omega vision of God can be found in Revelation 2:13. The concept of an instantaneous, perfect creation is not agreeable with Teilhard. In fact, he goes as far as to suggest that there is an ontological contradiction latent in the association of the terms ‘instantaneous’ and ‘creation’.³⁹⁰ Moreover, he argues that in the case of a static creation, God is necessarily structurally independent of his creation, and is thus, “without any definable basis to his immanence.”³⁹¹ The static creation is interpreted as Teilhard as too separatist; indeed such a view may be deistic in its character. In Teilhard’s view of God working through the laws of nature, God has a more intrinsic relationship with the world; God is involved in the here and now (however, he still emphasises God as Omega, which will be the subject of critique in section 3.6).

John Haught thus categorises Teilhard’s theology as a ‘metaphysics of the future’.³⁹² In Teilhard’s theology, not only does he emphasise the developing, evolving nature of the world, but also, he suggests it is progressing towards a point; God as Omega. He takes from science the idea of a world in a process of maturation, that will in the

³⁸⁹ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 240

³⁹⁰ *Ibid.*, p. 239

³⁹¹ *Ibid.*, p. 239

³⁹² John Haught, *God After Darwin: A Theology of Evolution*, (Oxford: Westview, 2000) p. 83

Christian worldview, eventually be unified with God in the eschaton.³⁹³ On this point, Teilhard may differ from the approach of scientists such as Jacques Monod, who interprets evolution as governed purely by fortuity and totally unrelated to whatever its effects on teleonomic functioning.³⁹⁴ However, Teilhard is adamant that his eschatological vision is no mere “flowering of the imagination” or metaphorical understanding, but is grounded in literal, scientific terms.³⁹⁵ In his reading of evolutionary science, he recognises a distinct orientation – a teleology of sorts, though the notion of teleology in evolution can be problematic, as will be discussed below.

Teilhard’s teleology is somewhat similar to Hegel’s philosophy of mind/spirit (depending on the translation of the German term *geist*), in that they both view mind/spirit as an epoch of nature – though Teilhard’s vision is explicated more in terms of evolution than Hegel’s pre-evolutionary philosophy.³⁹⁶ Teilhard perceives the state of nature as an original state of discordance or purposelessness – perhaps comparable to more modern understandings of evolution such as Monod’s. In the ‘tree of life’, Teilhard posits that originally, humanity was no more than one line among many others.³⁹⁷ However, at a certain point, he suggests that life perforated a significant boundary when consciousness emerged, “But it happened, for some reason of hazard, position or structure, that this sole ray among the millions contrived to pass the critical barrier separating the Unreflective from the Reflective – that is to say, to enter the sphere of intelligence, foresight and freedom of action.”³⁹⁸ The emergence of mind in life was for Teilhard a momentous event which

³⁹³ Pierre Teilhard de Chardin, ‘Turmoil or Genesis?’, Ian G. Barbour ed., *Science and Religion: New Perspectives on the Dialogue*, (London: SCM, 1969) pp. 225-226 [Originally published 1947]

³⁹⁴ Jacques Monod, *Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology*, (Glasgow: Fontana, 1974) p. 114 [Originally published 1970]

³⁹⁵ Pierre Teilhard de Chardin, ‘Turmoil or Genesis?’, p. 226

³⁹⁶ G.W.F. Hegel, *The Science of Logic*, trans. George Di Giovanni (Cambridge: Cambridge University Press, 2010) p. 517 [Originally published 1813]

³⁹⁷ Pierre Teilhard de Chardin, ‘Turmoil or Genesis?’ p. 222

³⁹⁸ *Ibid.*, p. 222

represented a transition in evolutionary nature from a state of aimless meandering to one with distinct progress:

[T]he whole essential stream of terrestrial biological evolution is now flowing through the breach which has been made. The cosmic tide may at one time have seemed to be immobilised, lost in the vast reservoir of living forms; but through the ages the level of consciousness was steadily rising behind the barrier, until finally, by means of the human brain (the most “centro-complex” organism yet achieved to our knowledge in the universe) there has occurred, at a first ending of time, the breaking of the dykes, followed by what is now in progress, the flooding of Thought over the entire surface of the biosphere. Thus regarded, everything in the history of the world takes shape, and what is better, everything *goes on*.³⁹⁹

Teilhard refers to the emergence of consciousness as the “sequel” to the monumental event of the origin of life itself;⁴⁰⁰ it is the key for explaining the progress of evolution. Consciousness, for Teilhard, is something which is markedly unique from the rest of life. In his view, human consciousness can be clearly discerned as the goal of evolution (of course this differs significantly from the understandings of biologists such as Monod), as he states:

If the universe, regarded sidereally, is in process of spatial expansion (from the infinitesimal to the immense), in the same way and still more clearly it presents itself to us, physicochemically, as in process of organic involution upon itself (from the extremely simple to the extremely complex) – and, moreover, this particular involution ‘of complexity’ is experimentally bound up with a correlative increase in interiorisation, that is to say in the psyche or consciousness.⁴⁰¹

He sees in evolution an evident convergence towards consciousness.⁴⁰² Consequently, his interpretation of evolution is decidedly teleological, allowing him also, to interpret evolution

³⁹⁹ Ibid., p. 222-223

⁴⁰⁰ Pierre Teilhard de Chardin, *The Phenomenon of Man*, (London: Fontana, 1965) p. 165 [Originally published 1955]

⁴⁰¹ Ibid., p. 329

⁴⁰² Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 141

eschatologically. Although Teilhard's writing predates much of our modern knowledge, it has also been suggested more recently that evolution is somehow converging towards certain goals. One proponent of such a view is the British palaeontologist Simon Conway Morris, who suggests that the reoccurrence of certain physical characteristics in life is indicative of a general teleology in the evolutionary process.⁴⁰³ Moreover, reminiscent of Teilhard's suggestion that consciousness is exhibitiv of a deeper purpose within the unfolding drama of the cosmos, the physicist Paul Davies asserts that the self-genesis of self-awareness in the universe is "no trivial detail, no minor by-product of mindless, purposeless forces."⁴⁰⁴ Therefore, Teilhard's views on consciousness do have modern parallels (though particular issues with the concept of teleology will be addressed below).

Teilhard builds upon the idea that evolution seems to be progressing, with consciousness signalling a significant milestone along the way – an idea he speculated would soon become generally accepted.⁴⁰⁵ In his eschatological theology, he maintains that the universe is continually being created and progressing towards a goal in the future, a unification of consciousness, "Through its axial, living, portion, the universe is drifting, simultaneously and in just the same way, towards the super-complex, the super-centred, the super-conscious."⁴⁰⁶ This future pinnacle, what Teilhard calls the 'Omega Point', is for him the source of salvation in a Christian context, "Surely, this 'Omega Point' (as I call it) is the ideal place from which to make the Christ we worship radiate."⁴⁰⁷ He goes further, then, by postulating that at this Omega Point, the conscious aspects of the universe will converge upon themselves – this, he feels will be humanity's redemption. At this point, Teilhard feels

⁴⁰³ Simon Conway Morris, *Life's Solution: Inevitable Humans in a Lonely Universe*, (Cambridge: Cambridge University Press, 2003) p. xii

⁴⁰⁴ Paul Davies, *The Mind of God: Science and the Search for Ultimate Meaning*, (London: Penguin, 1992) p. 232

⁴⁰⁵ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 141

⁴⁰⁶ *Ibid.*, p. 141

⁴⁰⁷ *Ibid.*, p. 143

he has produced a new theology, though the notion of a convergence of consciousnesses at the Omega seems highly speculative.⁴⁰⁸

Clarifications on Teleology

A shifting attitude towards a more progressive vision of the world in line with evolutionary theory is thus evident in Teilhard's work. The conceptual deviation away from the traditional 'backwards-looking' framework for understanding humanity and the world gives way to a 'forward-looking' understanding. The world is not, as Plato thought, a creation made as perfect as possible, but rather an incomplete 'work in progress'. There is, in Teilhard's theology of Omega, a discernable teleological element – a problematic concept which requires clarification.

Teilhard's advocacy for a shift in perspective of the religious worldview, from a historically felled creation to an unfinished, eschatological view, has been taken as a framework for modern dialogue between theology and evolution, notably by John Haught. Haught points to Teilhard, suggesting that he was one of the first scientists to fully realise that the world is presently and continually coming into being.⁴⁰⁹ Haught takes from Teilhard the idea of progress in evolution; that there is a definitive "coming of future" evident in the process.⁴¹⁰ He feels that, "in spite of the protests of many biologists, a cosmological perspective shows that there is a net overall advancement or "progress" in evolution after all."⁴¹¹ However, this concept may lead Haught into an intellectual cul-de-sac, given that he is very much aware and appreciative of the "randomness, struggle and seemingly aimless

⁴⁰⁸ However, some parallels, however tenuous they may seem, could be drawn with more modern theories in cosmology around the Omega such as that of David Deutsch – despite his idea of Omega being atheistic. David Deutsch, *The Fabric of Reality*, (London: Penguin, 1997) pp. 344-366

⁴⁰⁹ John Haught, 'In Search for a God of Evolution: Paul Tillich and Pierre Teilhard de Chardin', *Zygon: Journal of Religion and Science*, 37.3 (2002) p. 540

⁴¹⁰ John Haught, *God After Darwin*, p. 83

⁴¹¹ John Haught, 'In Search for a God of Evolution: Paul Tillich and Pierre Teilhard de Chardin', p. 541

meandering that the evolutionary story of life discloses....”⁴¹² How can Haught reconcile the vision of progress he takes from Teilhard, and the chance and necessity of the evolutionary process?

He attempts to reconcile this dichotomy by allowing for a “loose kind of teleology.”⁴¹³ He suggests that whilst evolution has the freedom to explore a multitude of avenues, he places constraints on such possibilities; the possibilities of life are not limitless.⁴¹⁴ As a result, Haught rejects the view of biologists who view the evolutionary process as completely governed by chance and necessity. Regarding how such ‘limits’ to the possibilities of evolution may actually apply, Haught refers to Morris’ theory of evolutionary convergence mentioned above.⁴¹⁵ The independent recurrence of particular features of life, (eyes and limbs, for example) leads Morris and Haught to the conclusion that there are underlying parameters within which evolution operates. Consequently, Haught adheres to a vision of evolution which from the outset, is governed to proceed in a certain way, culminating eventually in human consciousness. His approach seeks to appreciate the habituality and redundancy, along with the novelty of the evolutionary narrative.⁴¹⁶

Although adopting Teilhard’s framework for revising traditional understandings of God’s creative action brings more consonance between a religious worldview and evolutionary theory, Haught’s reliance on Morris’ theory of convergence can be disputed for at least two reasons. Firstly, although Morris’ argument has been adopted by theistic interpreters of evolution – John Polkinghorne is another example⁴¹⁷ – a hermeneutic of suspicion is immediately required when approaching such a position, particularly given that

⁴¹² John Haught, *God After Darwin*, p. 113

⁴¹³ John Haught, ‘The Boyle Lecture 2003: Darwin, Design and the Promise of Nature’, *Science and Christian Belief*, 17.1 (2005) p. 14

⁴¹⁴ John Haught, ‘Purpose in Nature: On the Possibility of a Theology of Evolution’, Simon Conway Morris ed., *The Deep Structure of Biology: Is Convergence Sufficiently Ubiquitous to Give a Directional Signal?* (Pennsylvania: Templeton Foundation, 2008) p. 230

⁴¹⁵ *Ibid.*, p. 230

⁴¹⁶ *Ibid.*, p. 230

⁴¹⁷ John Polkinghorne, ‘Rich Reality: A Response to the Boyle Lecture by Simon Conway Morris’, *Science and Christian Belief*, 18.1 (2006) p. 34

Morris' view may be an attempt to rebel against, as he himself writes, "our deracinated and nihilistic culture...."⁴¹⁸ More significantly still, evolutionary theory has been interpreted more commonly as an open-ended, indeterminate process; that the apparent teleology or patterns are merely a reflection of the self-contained processes of evolution themselves (prominent examples of such a view include Gould and Dawkins).⁴¹⁹ Secondly, and more pertinently from a theological perspective, is the acute implications for the problem of evil that evolutionary convergence brings; it implicitly denotes God as the creator of a process that is teeming with suffering from the outset (see section 1.6.2) – though this is stated whilst also being mindful of the fact that the interpretation of a 'world teeming with suffering' could be challenged.

Teilhard, as we shall see in section 3.5, believed the problem of evil was made impotent in light of a creation that is still being created. However, if creation has in place particular guidelines which it must follow, as in Morris' understandings of evolutionary convergence, then it must be asked why these guidelines allow for suffering. The degree of teleology implicit in evolutionary convergence, however "loose" it may be, inevitably revitalises the problem of evil. Indeed, Teilhard may well have agreed with Haught and Morris, but what I adopt from Teilhard in this thesis is to place greater emphasis on the notion that teleology emerges only once that sphere of intelligence has been penetrated – see the previous section.

In opposition to this assertion, the position could be defended that teleology was present throughout the process. In fact, if the first instance of true teleology in evolutionary morality for instance, is its manifestation in human behaviour, then this may ignore the long history of the development of morality in other species; altruism is not specific to humans, and therefore, to suggest that teleology only emerges in human manifestations of evolved

⁴¹⁸ Simon Conway Morris, 'Evolution and Convergence: Some Wider Considerations', Simon Conway Morris ed., *The Deep Structure of Biology: Is Convergence Sufficiently Ubiquitous to Give a Directional Signal?* p. 46

⁴¹⁹ Stephen Jay Gould, *A Wonderful Life*, p. 51, see also, Richard Dawkins, *River Out of Eden*, p. 155

morality may be a self-contradictory statement. Cambridge theologian Sarah Coakley, in her Gifford Lectures of 2012, developed such an argument which could be used as a critique of my view in this regard. She notes, with reference to the work of biologist John Maynard Smith, that evolution has seen various transitions, originally from the inorganic to the organic, then from individually-replicating molecules to chromosomes, from prokaryotes to eukaryotes, from single-celled organisms to multi-cellular organisms, from individuals to groups, and so on.⁴²⁰ She argues that evolutionary theory has indeed presented an image of the world that is seemingly “progressivist”; it has a sense of development.⁴²¹ Consequently, she suggests, “It would seem, then, that teleology – in this first and basic sense of goal-directed forms of life – is impossible to completely expunge from evolutionary-biological analysis....”⁴²² In contrast to the views of those such as Dawkins, who suggest that speaking of nature in terms of purposes or goals is an erred projection of human concepts onto a purposeless nature, Coakley feels that purposeful language can be appropriate. Alisdair MacIntyre offers a similar perspective, as he writes that when we speak of gorillas or dolphins acting for a purpose, we are not using such language merely analogically, but rather, univocally.⁴²³

There are two distinct problems, however, with this assertion that teleological language is appropriate when discussing non-human life. Firstly, it may be conflating the purpose of individual organs or animals, with the purpose of nature. There is no contradiction in suggesting that animals (gorillas or dolphins for instance) do indeed act purposefully, with holding that there is no inherent purpose in the evolutionary process itself. Secondly, it may conflate the notion of teleology and development; as Coakley rightly

⁴²⁰ Sarah Coakley, ‘Teleology Reviewed: A New “Ethico-Teleological” Argument for God’s Existence’, The Gifford Lectures, University of Aberdeen, 2012, http://www.abdn.ac.uk/gifford/documents/Gifford_Lecture_5_-_lecture_text.pdf accessed 15th Dec. 2012 p. 11

⁴²¹ Ibid., p. 12

⁴²² Ibid., p. 11

⁴²³ Alisdair MacIntyre, *Dependent Rational Animals: Why Human Beings Need Virtues*, (Illinois: Open Court, 1999) p. 64

asserts, evolution does present an image of progression or development to some extent – yet this development does not imply teleology. Development can be non-teleological.

Coakley herself acknowledges that use of such teleological terminology can be deeply problematic, and she therefore ensures us that she does not use the term ‘teleology’ in an extrinsic or theological way.⁴²⁴ She claims that she is not suggesting that this apparent teleology should be explained by referral to an extrinsic designer, for this she rightly indicates, could be seen as a “last gasp of the extrinsic ‘God of the gaps’”⁴²⁵ Moreover, as Coakley dutifully points out, the phenomenon of seemingly teleological structures of evolutionary order could easily be attributed to the evolutionary processes themselves.⁴²⁶ Pertaining to morality, then, viewing the overall evolutionary process as non-teleological as I do, could be ‘explaining away’ morality, as several critics suggested in the previous chapter. Why should one consider human morality as indicative of anything more than a facade for genetic desires, when this is how one views altruism in the rest of the natural world?

The answer I propose, also mentioned in the previous chapter, is that human morality is reflective of a particularly significant transition in evolutionary history, a notion taken in part from Teilhard. Though altruistic behaviour exists among animals, there is something distinct about human morality. For example, Coakley refers to humanity’s capability for ‘supernormal’ morality, which becomes the context for theological reflection.⁴²⁷ This refers to the concept that human morality can transcend its genetic predispositions and become an indiscriminate moral sense – for example, in the Christian notion of *agape*. The advent of human consciousness, and hence free will, moves morality out of the realm of evolutionary functional behaviour, as evident in ants and bees etc., to a

⁴²⁴ Sarah Coakley, ‘Teleology Reviewed’, p. 11

⁴²⁵ Ibid., p. 19

⁴²⁶ Ibid., p. 18

⁴²⁷ Ibid., p. 19

genuine morality. To use Dawkins' phrase, the rebellion against the tyranny of our genes signifies 'something more' – which will be equated to Paul Tillich's notion of depth in section 3.4. It is this supernormal morality that, as discussed in the last chapter, is an emergent property, and thus not completely explicable in terms of functionality. With the onset of human supernormal morality, indications of actual teleology, in a more theological understanding, emerge. It is the evolution of morality that points to a greater depth in the natural process, rather than the seeming physical convergences throughout.

Consequently, evolutionary theory has a marked impact on how theology presents its understanding of morality, good, and evil, by forcing a shift in understanding away from one of historicity, and perhaps, to one of futurity, as expressed in the work of Teilhard and adopted by Haught – though there are also further problems with this eschatological view which will be discussed in section 3.6. For Haught, a major implication of this shift in worldview is that it provides hope – thus, being congruent with the central message of this thesis, "One implication of our living in an unfinished universe is that we can become attuned to the deep promise of nature only by wagering to indulge our native propensity to hope."⁴²⁸ So the shift in worldview does contribute to the central argument of this thesis, though I will be more specific by highlighting evolutionary ethics as the indicator of hope/teleology.

Notwithstanding, it must also be acknowledged here that we (theologians and others) should be very cautious in how we approach the idea of progress towards the future; I have suggested that an appropriate way to proceed is to envisage evolution as an aimless process until the unique period of the evolution of consciousness, or more specifically here, morality. Contrary to the notions of evolutionary convergence, or indeed intelligent design or biblical literalism, it is only at this point, that discussions of conscious teleology become

⁴²⁸ John Haught, *Deeper Than Darwin*, p. 50

intelligible. It could be then asked, whether or not there was any necessity that morality would evolve. This is where, as Teilhard suggested, creation can be seen as “an adventure, a risk, a battle” – though this does not subtract from the religious picture.⁴²⁹ The very idea of morality or consciousness being a foreseen event may in fact diminish its significance. Haught goes as far as to suggest that a world which was foreseeable by God becomes a pointless puppet.⁴³⁰ Haught’s sentiment may be too strong in this respect, and thus a weaker (though similar) premise is accepted here; knowing the outcome of events may diminish their significance. Conversely, one could argue that, for example, re-reading a novel where one knows the outcome may not be pointless; even if the outcome is known, intellectual stimulation, enjoyment, etc. can still occur. However, I argue that such a reading would not be as significant as the first reading of the novel; it is akin to watching an sporting event already knowing the outcome; not completely pointless perhaps, but less significant than if the result were not yet known.

Teilhard poses similar reflections with respect to the significance of unforeseen events by referring to the biblical narrative. He suggests that the expiatory vision of a transgression which God could have averted is difficult to look upon sympathetically.⁴³¹ If God had planned the world, then the inevitability of the fall would not represent much of a transgression, but merely be the manifestation of planned events. It is only when we opt for a panoramic perspective of the universe in a struggle against evil in being created, that goodness can take on the importance and beauty which it should be afforded.⁴³² Furthermore, as stated in section 3.1, it is only with the evolution of the moral sense that talk of evil becomes intelligible – a framework of morality predictive of human pain and suffering would allow the theological critic to argue that evil is a condition from the outset,

⁴²⁹ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 84

⁴³⁰ John Haught, *Christianity and Science*, p. 94

⁴³¹ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 84

⁴³² *Ibid.*, p. 84

and thus, a responsibility of an architect image of God. Therefore, there is significant reason to adhere to a non-teleological model of the world up to the point of the emergence of human consciousness/morality (though strictly speaking, this is not as much a ‘point’ as a period).

The cardinal message from the above analysis, is that evolutionary theory has forced a shift away from visions of a historical fall, and towards more developmental (or often eschatological) conceptions of the world; this shift is evident in varying degrees in the theology of Teilhard, Haught and others. Although the thrust of sociobiological theory under specific investigation in this thesis had not emerged at the time of Teilhard’s writing, he was fully cognizant of the implications an evolutionary worldview brought for theological understandings of good and evil. Teilhard was certainly aware that his views represented a deep shift from the prescribed Catholic vision as set forth in the Council of Trent in the sixteenth century. Yet his scientific background forced him to strongly appeal for renewal on this important understanding:

I fully appreciate the seriousness of the changes introduced by these new views. I am familiar with the solemn decrees of the Council of Trent on the subject of original sin. I am aware of the infinite network of formulas and attitudes through which the idea that we are the guilty children of Adam and Eve has percolated into our Christian life. Yet I beg my readers to reflect, calmly and impartially... for all sorts of reasons – scientific, moral and religious – the classic *depiction* of the Fall has already ceased to be for us anything but a straight-jacket and a verbal imposition, the *letter* of which can no longer satisfy us either intellectually or emotionally. In its material representation, it no longer belongs either to our Christianity or to our universe.⁴³³

3.4 The Divine in an Evolutionary Worldview

Having expressed how evolutionary theory has forced a re-imagined outlook on the ontological framework within which good and evil are understood, attention must now be

⁴³³ Ibid., p. 86

given to how the divine may be understood within this framework. As Haught points out, on this issue, he finds Teilhard's theology deficient.⁴³⁴ Whilst Teilhard succeeded in articulating the importance of evolution for religious ideas of reality and human existence, Haught suggests that "his own efforts to construe a 'God for evolution' stopped short of the systematic development his intuitions demanded."⁴³⁵ In this regard, Haught makes the valuable suggestion that we should look to and perhaps build upon the theology of Paul Tillich.⁴³⁶

Haught expresses disillusionment at the fact Christian theologians have, with the exception of a small minority, neglected the natural world – theology predominantly exists as divorced from the cosmos.⁴³⁷ A preoccupation with the transcendent 'beyond' has led to a spurning of the immanent 'here' – a critique of religious thought also expressed at least implicitly by Nietzsche's fictional *Zarathustra*, "I love those who do not first seek behind the stars for a reason to go under and be a sacrifice, who instead sacrifice themselves for the earth, so that the earth may one day become the overman's."⁴³⁸ Ultimately, Haught still feels that Tillich's theology falls short of a proper integration of theology and evolution; Tillich's idea of existence erupting as a separation from a Platonic notion of being still, for Haught, places too much emphasis on a narrative of loss followed by a sought-after reunion.⁴³⁹ That caveat being acknowledged, however, Haught still points to Tillich's notion of our having the courage to orient our lives towards the future as a key step towards a theology of evolution.⁴⁴⁰ Tillich appreciates our responsibility to become participatory, creative co-creators in an interdependent world.⁴⁴¹ This theme is echoed and explicitly articulated in

⁴³⁴ John Haught, 'In Search for a God of Evolution: Paul Tillich and Pierre Teilhard de Chardin', pp. 540-541

⁴³⁵ *Ibid.*, pp. 540-541

⁴³⁶ *Ibid.*, p. 541

⁴³⁷ *Ibid.*, p. 542

⁴³⁸ Friedrich Nietzsche, *Thus Spoke Zarathustra: A Book for All and None*, trans. Adrian Del Caro, Adrian Del Caro and Robert. B. Pippin eds., (Cambridge, Cambridge University Press, 2006) p. 8 [Originally published 1885]

⁴³⁹ John Haught, 'In Search for a God of Evolution: Paul Tillich and Pierre Teilhard de Chardin', pp. 549

⁴⁴⁰ *Ibid.*, p. 551

⁴⁴¹ Paul Tillich, *The Courage to Be*, (New Haven: Yale University Press, 2000) p. 46 [Originally published 1952]

more modern theological dialogue with evolutionary theory, such as that of Philip Hefner who argues that our existing and participating in our evolutionary reality is God's will.⁴⁴² Therefore, given that Tillich does appreciate our responsibility in a forward-looking metaphysic, it may still be instructive to refer to Tillich as it pertains to envisioning the divine in the evolutionary setting presented above.

The developmental or evolutionary aspects of an eschatological theology, such as those of Teilhard and Haught, are appropriate reflections of what we have learned from evolutionary theory. In addition, it has been asserted in this chapter, that any sense of teleology only emerges with the evolution consciousness and the moral sense – it is that sense which, in line with Paul's Adam-Christ dichotomy, signifies a transition in the world from moral indifference to a moral reality; it is only with the good, that we really know the bad. What is to be added to this perspective here, is how one envisages God in this context; no longer is the architect, expiatory vision of God appropriate. It is proposed thus, that Tillich's understanding of the divine as depth is a good candidate for a suitable understanding of the divine in light of our understanding of nature and evolutionary ethics.

Tillich takes as his starting point, scriptural references to the theme of depth, "these things God has revealed to us through the Spirit; for the Spirit searches everything, even the depths of God" (1 Cor. 2:10). He uses the concept of depth not as spatial, but as a lexical symbol for a spiritual dimension.⁴⁴³ The banalities of everyday life, Tillich writes, are surface-level distractions which drive us from own existence, as opposed to us being in command of it – and here is where Haught's apprehension about the inadequacies of Tillich's theology may be apparent, as it is still quite transcendental.⁴⁴⁴ True being, Tillich feels, is beneath our surface experiences; there is a depth beneath our day-to-day experiences, which he identifies as true being. It is this infinite and inexhaustible depth

⁴⁴² Philip Hefner, *The Human Factor: Evolution, Religion and Culture*, (Minneapolis: Fortress, 1993) p. 27

⁴⁴³ Paul Tillich, *The Shaking of Foundations*, (Middlesex: Penguin, 1966) p. 59 [Originally published 1949]

⁴⁴⁴ *Ibid.*, p. 62

which Tillich identifies as God.⁴⁴⁵ The aspects of our human experience, which seem to be more than what we experience on the surface level, are indicators of depth. Tillich notes that it is that spiritual dimension which religious symbolism attempts to signify. In the context of this thesis, it can be argued that consciousness (as with Teilhard) or the evolution of the human moral sense, are examples of indicators of depth. They point to something emergent, something more than the sum of their parts: ‘depth’.

Viewing morality or consciousness in this way as an indicator of depth is not to stand in opposition to a physicalist view, as advocated by philosophers of mind such as Daniel Dennett.⁴⁴⁶ It is to acknowledge that consciousness and morality are emergent properties – they can be somewhat explained by reference to physics/chemistry/biology, though this does not diminish their reality or significance (recall the discussion on emergence and reductionism in Chapter Two). Therefore, even though Tillich’s concept of the divine as depth is rather transcendentalist, this does not prevent one from adopting it as an element of a theology that does appreciate the natural world – in other words, to adopt Tillich’s notion of depth is not to persist with a theology which Haught classifies as “divorced from the cosmos” but rather to contribute to a theology that is in fact, inspired by the cosmos, or more specifically in this case, the evolutionary process and evolutionary ethics.

Admittedly, as any critic could point out at this stage, Tillich’s notion of the divine as depth is deeply ambiguous. However, this critique may stem from an intellectual paradigm which seeks clarity when none may be possible. In this regard, Coakley makes the relevant point that since the advent of science, which she approximates with Francis Bacon in the sixteenth/seventeenth century, there has been a shift in theological understandings of God which in line with science, seek God in the natural world. She argues that those such as

⁴⁴⁵ Ibid., p. 63

⁴⁴⁶ Daniel C. Dennett, *Consciousness Explained*, p. 33

William Paley and modern intelligent design proponents are attempting to rationalise an extrinsic divine designer “who implicitly inhabits the same time and space spectrum as the creation itself, and thus competes for space within it.”⁴⁴⁷ These understandings of God, she feels, have shrunk to mechanistic accounts of efficient causation; they are nothing like “the earlier, scholastic, divine Being as found in Thomas Aquinas’ theology: atemporal, possessed of all omni-perfections to an eminent degree, the necessary sustainer of all that is, and utterly ontologically distinctive *qua* creator ‘out of nothing’.”⁴⁴⁸

Therefore, Tillich’s association of the divine with depth, whilst perhaps not in line with modern preoccupations with clarity and temporality, is more akin to the God of classical philosophers such as Aquinas. Tillich explains that depth then, whilst perhaps ambiguous, abstract, and ineffable, can be evidenced in many places, for example, in the characters of those with whom we form interpersonal relationships on a daily basis; we can dig deeper into people’s true being.⁴⁴⁹ Interestingly, Tillich also finds support for the reality of depth with Nietzsche, who despite his advocacy of atheism, wrote, “The world is deep, and deeper than the day could read. Deep is its woe. Joy deeper still than grief can be. Woe says: Hence go! But joys want all eternity, want deep, profound eternity.”⁴⁵⁰

The apparent reality of depth can be taken then as indicative of the divine. For Haught, more specifically, it is indicative of a progressive creation; he considers particularly important Teilhard’s vision of God as Omega.⁴⁵¹ In this sense, he consolidates Tillich’s idea of God as depth with Teilhard’s eschatological theology. God is evident in the depth of experience, though the world is an ongoing creation. Therefore, Haught provides a metaphysical appropriation which places God at the end of creation – one which fits far more comfortably with our knowledge of evolution than the traditional framework of an

⁴⁴⁷ Sarah Coakley, ‘Teleology Reviewed’, p. 7

⁴⁴⁸ *Ibid.*, p. 7

⁴⁴⁹ Paul Tillich, *The Shaking of Foundations*, p. 60

⁴⁵⁰ *Ibid.*, p. 69

⁴⁵¹ John Haught, ‘In Search for a God of Evolution: Paul Tillich and Pierre Teilhard de Chardin’, pp. 542

instantaneous creation. Concurrent themes which stress the futurity of God can also be found to varying degrees in other important theologians such as Rahner and Wolfhart Pannenberg.⁴⁵² In addition, it could be argued that the evolution of morality is an appropriate indicator of teleology, and thus, depth – though I differ from Haught on *a priori* teleology/eschatology.

3.5 Eschatology and Evil

The move towards an evolutionary or eschatological worldview explored thus far in this chapter has been largely concerned with metaphysical systems. However, Willem B. Drees makes the important assertion that eschatology could be viewed as a counterpart to axiology; a reflection upon values, “... the task is to detect what is going on in the events that take place and to determine in which direction we should go.”⁴⁵³ Moreover, Drees suggests that a merging of an axiology with a cosmology (whether or not one assumes that cosmology to be eschatological or not) is a heuristic formulation of what theology is or should be.⁴⁵⁴ Drees’ statements here are particularly judicious in the context of the current discussion which very clearly treads between axiological and cosmological frameworks; how our broader, metaphysical or cosmological picture of God and creation is influenced by our understanding of evolutionary morality. Consequently, Drees advocates that eschatology should be understood as “... almost the worldly component of a *theodicy*, a defence of the compatibility of a good God with the evil in the world....”⁴⁵⁵

Although evolutionary theory re-frames the question of how evil entered a world made good, it does not fully negate the problem of evil. The Augustinian theodicy which underpins the traditional appreciation of good and evil is indeed made obsolete in light of

⁴⁵² Karl Rahner, *Theological Investigations: VI*, trans. Karl H. and Boniface Kruger, (London: Darton, Longman and Todd, 1969) p. 60, and Wolfhart Pannenberg, *Faith and Reality*, (London: Search, 1977) p. 57

⁴⁵³ Willem B. Drees, *Beyond the Big Bang: Quantum Cosmologies and God*, (Illinois: Open Court, 1990) p. 117

⁴⁵⁴ Willem B. Drees, *Creation: From Nothing Until Now*, (London: Routledge, 2002) p. 60

⁴⁵⁵ Willem B. Drees, *Beyond the Big Bang*, pp. 119-120

sociobiology. But the problem remains; why would God create a world which exhibits so much pain and suffering? Moreover, as Messer notes, even the Augustinian vision of sin/punishment becomes problematic on a reading of Genesis; why did God create the subtlest of all creatures, the serpent?⁴⁵⁶ So the theodicy problem must be kept in mind when formulating a new metaphysic/metaethic to succeed the Augustinian conception. A new vision must acknowledge the theodicy problem whilst at the same time be appreciative of evolutionary ethics.

However, as noted in the first chapter, there has been some hesitation regarding such a revision; theologians such as Johnathan Chappell, Raymond Schwager, and R.J. Berry persist in some notion of a fall, albeit modified to be amenable to scientific theories (see section 1.5.1). More previously, the significant contributions to this field by Teilhard were strongly opposed, thus highlighting some scepticism regarding moving away from traditional representations of a sin/punishment theodicy. Teilhard was eventually forbidden to teach in the Catholic Institute in Paris because of the perceived unorthodoxy of his beliefs.⁴⁵⁷ Furthermore, in his encyclical *Humani Generis*, Pius XII implicitly condemned Teilhard's thinking and persisted with a more traditional understanding of original sin.⁴⁵⁸ Teilhard's theology, which was deeply influenced by his background in palaeontology and what he saw as a progressive world, conflicted starkly with the mainstream notion of an *ex nihilo* creation as expressed in Pius XII's 1941 address to the Pontifical Academy of Science (though Pius XII did later acknowledge the advances in evolutionary science in his *Humani Generis*).⁴⁵⁹

⁴⁵⁶ Neil Messer, *Selfish Genes and Christian Ethics*, p. 196

⁴⁵⁷ Don O'Leary, *Roman Catholicism and Modern Science: A History*, (London: Continuum, 2007) p. 158

⁴⁵⁸ Pius XII, *Humani Generis*, (Rome: 1950)

http://www.vatican.va/holy_father/pius_xii/encyclicals/documents/hf_p-xii_enc_12081950_humani-generis_en.html accessed 18th Aug. 2013

⁴⁵⁹ Pius XII, 'God the Only Commander and Legislator of the Universe', *Papal Addresses to the Pontifical Academy of Sciences*, p. 92

Despite this resistance, Teilhard made some headway with the theodicy question by considering how an eschatological vision of an evolving creation negates in his opinion, the problem of evil. In an evolving, unfinished creation, evil becomes a natural feature. This approach is not wholly dissimilar to the one which will be advocated in the next chapter; at this point, however, a framework for responding to theodicy which is consistent with what we learn from sociobiology, must be considered as another element of the broader shift in worldview.

Moral Evil as a Consequence of Incomplete Progress

Teilhard's outlook on theodicy is an interesting element of his eschatology, and is relevant in the context of this work given the centrality of theodicy in the Augustinian framework for appreciating good and evil explored in Chapter One. Teilhard's eschatological metaphysics discounts the traditional sin-punishment model, and as a result he must consider how this problem may be appropriated in his new 'metaphysics of the future'. The crux of Teilhard's approach to the problem of evil is ultimately perhaps one of resignation as he feels it is a conceptual fantasy to envisage a world without evil.⁴⁶⁰ He challenges an implicit assumption of the problem, namely, that God could ever "draw from non-being a world without sorrows, faults, dangers – a world in which there is no damage, no breakage."⁴⁶¹ For Teilhard, evil is a strictly inevitable concomitant of creation, as Matthew (18:7) exclaims, "Woe to the world because of stumbling blocks! Occasions for stumbling are bound to come...."⁴⁶² The shift in the conceptual asymmetry of good and evil – from conceiving a good creation, questioning evil, to a natural struggle for existence, questioning goodness – is very much evident in Teilhard. He writes how the challenge for the religious worldview is no longer to expiate and restore a lost perfection, as in the Augustinian tradition, but to create and fight against

⁴⁶⁰ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 33

⁴⁶¹ *Ibid.*, p. 33

⁴⁶² *Ibid.*, p. 33

evil.⁴⁶³ Put simply, evil is the antithesis to creation; in Teilhard's words, it is the "negative of the photograph... the shadows on the landscape... the abysses between the peaks."⁴⁶⁴

By positing that evil was not necessarily a positive force but rather a necessary by-product of an unfinished creation, Teilhard is comparable to Augustine's notions of evil as privation of good – see section 1.3. However, Teilhard's assessment of creation contrasts with the conventional *ex nihilo* view. He is emphatic that a paradisiacal past is an untenable vision in light of our understanding of evolution, "Yet, however far back we look into the past we find nothing that resembles this wonderful state. There is not the least trace on the horizon, not the smallest scar, to mark the ruins of a golden age or our cutting off from a better world."⁴⁶⁵ He acknowledges that the history of the world is dominated by pain and suffering, and thus to combine the doctrine of the fall with our scientific outlook, would lead us to become "victims of an error in perspective."⁴⁶⁶

Notwithstanding his repeal of a more historical appropriation of creation and the fall, Teilhard does continue to use the concept of original sin, though re-imagined to appreciate evolutionary theory. In his understanding of an evolving, unfinished creation, evil is an intrinsic side-effect. Therefore, he uses original sin to represent the "actual medium in which the totality of our experience develops."⁴⁶⁷ The Fall is understood not as a historical event, but rather, "as a general condition affecting the whole of history."⁴⁶⁸ Original sin is not a teaching of science or theology, Teilhard writes, but a teaching about human nature; this understanding of original sin gives further weight to the parallels drawn in Chapters One and Two, between original sin and the philosophies of Schopenhauer, Huxley, and perhaps even Darwin.

⁴⁶³ Ibid., p. 147

⁴⁶⁴ Pierre Teilhard de Chardin, *The Phenomenon of Man*, p. 339

⁴⁶⁵ Pierre Teilhard de Chardin, *Christianity and Evolution*, p. 47

⁴⁶⁶ Ibid., p. 47

⁴⁶⁷ Ibid., p. 149

⁴⁶⁸ Ibid., p. 191

Although Teilhard's opinions on evil are worth noting, Drees argues for emphasis to be placed on an eschatology which expresses concern for justice and the brokenness of creation – in other words, an eschatology that make a contribution to theodicy.⁴⁶⁹ Consequently, it could be argued that Teilhard's negation of the problem of evil is insufficient. If Drees' argument is taken on board, then it is important to consider how current injustice may be understood as an element of our worldview, in a way which is also fully cognizant of evolutionary ethics. As noted in Chapter One, the existence of injustice or evil has been a staple argument in the arsenal of religious critics, as well as eliciting many attempts to reconcile divine beneficence with experienced reality. Despite this plurality, John Hick discerns two major approaches from the history of Christian thought; one he attributes to Augustine, and the other, to Irenaeus. Substantial arguments have been presented hitherto, which have demonstrated the serious deficiencies in Augustine's theodicy in terms of understanding original sin and the fall as a historical narrative in light of evolution – despite of course noting the correspondences between original sin as an outlook on the human condition and the Darwinian principles of survival of the fittest. Therefore, I look to Hick's understanding of Irenaeus for a response to theodicy that can comfortably coalesce with the developmental nature of evolutionary theory (again, being mindful of the use of the word 'developmental' and whether or not this is taken to be *a priori* development, or development from within – as discussed in section 3.3).

It has been maintained here that evolutionary theory requires theologians to make a definitive shift away from the Augustinian understanding of the fall and develop a framework that is more developmental, or perhaps eschatological, in its orientation. This shift in focus, I have argued, can be discerned in the writings of Teilhard, and more recently Haught, amongst others. As noted above, Teilhard does give some attention to the theodicy

⁴⁶⁹ Willem B. Drees, *Beyond the Big Bang*, pp. 118-122

question in the context of his evolutionary theology. Hick's approach is similar, and could therefore also be considered an element of an appropriate response to theodicy that fits within an eschatological framework; it is an approach which could be called 'developmental'. Regarding this response to theodicy, two points must be made.

Firstly, what Hick calls an Irenaean theodicy is not a theodicy explicitly pronounced in the writings of Irenaeus. Rather, Irenaeus is discerned as the first great Christian theologian to think along systematically developmental lines and thus, Hick feels, it is proper that Irenaeus' name be associated with this type of theodicy.⁴⁷⁰ A more accurate description of what Hick terms an Irenaean theodicy would be to point out that a particular understanding of evil and the world was common amongst early Eastern Christian writers, and Hick's own view seeks to return to this position as an alternative to the more dominant Augustinian representation of a fall narrative. Secondly, what spurs Hick to seek an alternative to the Augustinian view is what he feels is the "radical incoherence" of the Augustinian model itself, whereas in this context, an alternative to the traditional narrative is being sought due to its inadequacies in light of evolutionary theory.⁴⁷¹

Furthermore, in turning to Hick and his Irenaean theodicy, the distinction between natural and moral evil becomes important. In light of evolutionary theory, and specifically evolutionary ethics, Hick's Irenaean theodicy is an appropriate starting point for a response to theodicy with regard to moral evil, that is, the moral imperfections of humanity poignantly apparent throughout our history. Natural evil is not as easily reconciled in this view, and my motivation for departing from his view in that respect will be discussed in section 4.2.2. Hick summarises the Irenaean theodicy in contrast to the Augustinian tradition as follows:

⁴⁷⁰ John Hick, *Evil and the God of Love*, p. 215

⁴⁷¹ *Ibid.*, p. 250

Instead of the doctrine that man was created finitely perfect and then incomprehensibly destroyed his own perfection and plunged into sin and misery, Irenaeus suggests that man was created as an imperfect, immature creature who was to undergo moral development and growth and finally be brought to the perfection intended for him by his Maker. Instead of the fall of Adam being presented, as in the Augustinian tradition, as an utterly malignant and catastrophic event, completely disrupting God's plan, Irenaeus pictures it as something that occurred in the childhood of the race, an understandable lapse due to weakness and immaturity rather than an adult crime full of malice and pregnant with perpetual guilt.⁴⁷²

The crux of this theodicy, is that humanity's moral sense is at present, deeply imperfect and incomplete, thus accounting for acts of moral evil. Our sinful nature is not a stark rebellion against a perfect creation, but rather, a corollary of our incomplete development.

Ireneaus' own view of a developing morality is articulated by distinguishing between the 'image' and 'likeness' of God in Genesis 1:26, a distinction which Hick considers exegetically dubious. As Hick explains, "His view was that man as a personal and moral being already exists in the image, but has not yet been formed into the finite likeness of God."⁴⁷³ The *imago dei* as Irenaeus understands it, pertains to humanity as personal and moral beings. The likeness of God, however, pertains to a certain valuable quality of life which reflects the divine, "This represents the perfecting of man, the fulfilment of God's purpose for humanity...."⁴⁷⁴ Irenaeus pictured humanity as transitioning from the image towards the likeness. In a similar vein to Teilhard, the Irenaean theodicy is thus "developmental and teleological. Man is in the process of becoming the perfect being whom God is seeking to create."⁴⁷⁵

This developmental understanding of our morality aligns comfortably then, both with a developmental metaphysic, and an evolving picture of human morality understood through evolutionary ethics. Our appreciation of evolutionary ethics requires a necessary

⁴⁷² Ibid., pp. 214-215

⁴⁷³ Ibid., p. 254

⁴⁷⁴ Ibid., p. 254

⁴⁷⁵ Ibid., p. 256

shift in understanding towards a developmental worldview, such as outlined in this chapter, and subsequently, it requires a developmental theodicy to replace the previously dominant Augustinian theodicy. Irenaeus' theodicy as explored by Hick, is an example of such a theodicy. It becomes then, a further example of a shift in theology towards a more developmental vision; in Hick's account, human morality is developing towards a goal, the 'likeness' of God, and is thus eschatological (which for Hick, culminates after death).⁴⁷⁶ The evolving view of morality as understood through evolutionary ethics endorses this shift, given the mutual emphasis on development or progress (though of course, evolutionary accounts of ethics are not necessarily eschatological, and thus it is the developmental aspects of eschatological theology I adopt, rather than the eschatology itself). Yet a developmental view still requires a theodicy, and this necessary theodicy may be found with Hick, at least as it pertains to moral evil. If this theodicy is coupled with the developmental aspects of the metaphysical frameworks of Teilhard, Haught, Tillich, Rahner, Pannenberg and others, it provides a theological view which has consonance with evolutionary theory, or more specifically, evolutionary ethics.

3.6 Eschatology and Present Moral Responsibilities

Whilst there has been a decisive shift in thinking towards a developmental or eschatological view in certain branches of contemporary theology, inspired either by evolutionary theory (as with Haught/Teilhard) or by the apparent self-defeating statements of the Augustinian view (as with Hick), such an eschatological worldview could be problematic. Although it can be contended that the eschatology and theodicy explored above are appropriate responses to evolutionary theory, it must be understood that they are not without their own inherent problems. One substantial caveat is identified by Drees; an eschatological vision

⁴⁷⁶ Ibid., pp. 341-352

may render itself acquiescent to present injustice, “An evolutionary faith is in danger of subsuming present suffering and injustice under a future happiness and thus becoming the optimistic expectation of ‘an other time’.”⁴⁷⁷

Upon reflecting on our knowledge of evolutionary theory, theologians such as Haught have placed greater emphasis on development, progress and future. Haught for example, is explicit in this regard; his worldview is anticipatory, “grasped by the futurity of the divine promise.”⁴⁷⁸ Similarly, although Hick’s Irenaean theodicy can account for current suffering as a result of incompleteness, it is expectant that perfection will eventually be manifest in a ‘good eschaton’, as Hick explains, “This is the belief that the Kingdom of God, as the end and completion of the temporal process, will be a good so great as to justify all that has occurred on the way to it, so that we may affirm the unqualified goodness of the totality which consists of history and its end.”⁴⁷⁹ Such a hopeful vision may be, as Drees suggests, in danger of diverting our attention from the injustices of the present. The anticipation of a future perfection which will appear irrespective of current evils provides no incentive for us as humans to become responsible and participatory co-creators.⁴⁸⁰ It should be noted, however, that in this regard, the Augustinian conception fares no better, as it too expects perfection in a spiritual realm, again diminishing the relevance of the present, and our activities of the present.⁴⁸¹

An important point can be taken from Drees with regard to why even an eschatological theodicy such as that of Hick/Irenaeus might be considered insufficient. Our understanding of cosmology clearly indicates the vastness of the timescale we occupy. Therefore, when we think of the eschaton in relation to cosmology, we realise that this event may be billions of years away, perhaps with the burning out of the sun or the eventual

⁴⁷⁷ Willem B. Drees, *Beyond the Big Bang*, p. 148

⁴⁷⁸ John Haught, *Christianity and Science*, p. 46

⁴⁷⁹ John Hick, *Evil and the God of Love*, p. 238

⁴⁸⁰ Willem B. Drees, *Beyond the Big Bang*, p. 151

⁴⁸¹ *Ibid.*, p. 151

demise of the universe, be that through heat death, a ‘big crunch’ or another scenario. Therefore, by locating hope/perfection and the justification of evil at the Omega, as in the theology of Teilhard, Haught, Hick and others, it is so far away that it becomes severely diluted. As Drees explains, the locating of hope in a bright future puts it at too great a distance, “The next few generations, say children and grandchildren, have relevance by virtue of their relation to us. Beings a few thousand generations hence, or even much further away, do not inspire us to do something about the quality of their lives.”⁴⁸²

We are left then, with the question of how to interpret the divine and a metaethic to frame discussion on good and evil in light of Drees’ critique of the perhaps untenable emphasis on the distant future apparent in eschatological visions. In highlighting the problems with a God “pushed to a distant past or future”, Drees then argues that it is in fact the present that is God’s primary locus.⁴⁸³ However, he goes on to also place emphasis on God’s otherness, thus returning to the image of the God of the philosophers, such as Aquinas. This makes evident again the distinction drawn by Coakley between an atemporal God, and the temporal idea of God evident in William Paley and others’ search for a ‘God of the gaps’.⁴⁸⁴ The term Drees uses to describe God’s relationship to the world is ‘present transcendence’.⁴⁸⁵ God is other than the world, though not at a distant past or distant future, but in the present. This otherness, could be equated to what Tillich terms ‘depth’, and was argued in section 3.4 to be a suitable understanding of God. Moreover, if we recall the previous chapter, evolutionary understandings of ethics stress the role of consciousness. Therefore, an evolutionary understanding of ethics appreciates the importance of our present responsibilities in moral behaviour; we cannot rely on our nature, nor can we rely on a future so distant it becomes irrelevant. We must rely on ourselves and our present consciousness.

⁴⁸² Ibid., p. 205

⁴⁸³ Ibid., p. 199

⁴⁸⁴ Sarah Coakley ‘Teleology Reviewed’, p. 7

⁴⁸⁵ Willem B. Drees, *Beyond the Big Bang*, p. 199

We may not need evolutionary understandings of ethics to be moral and appreciate our present responsibilities, but in a metaphysical framework, these understandings can provide more support for acknowledging our responsibility than eschatological worldviews alone.

3.7 Culmination of Evolutionary and Axiological Themes

Consequently, whilst evolutionary theory has in part inspired a shift to an eschatological vision in contemporary theology, there are issues with such a shift; namely, the relegation of the present into irrelevance, and the non-directionality of evolutionary theory. Notwithstanding these important problematic issues, the developmental aspect of the eschatological worldview is something worth retaining, given its clear consonance with evolutionary theory and evolutionary ethics. Again, this is not a mere compliant accommodation of science in a cheap attempt to retain intellectual credibility in a scientific age, but a commitment to acknowledging the progress that science has made in contributing to our understanding of the world. Therefore, as stated in the introduction, what is required is an axiological theology that satisfies the following four criteria; i) it appreciates the evolving nature of the world, the evolving nature of goodness, and the evolving nature of God's creative action ii) it makes reference to the divine, iii) it provides a response to the theodicy question, and iv) it appreciates our present responsibilities. I argue that elements of the above theologies satisfy these four criteria when conjoined with our understandings of the evolution of our moral sense.

Firstly, the evolving view of the world as made known through evolutionary science has clearly been accommodated by contemporary theologians, Teilhard in particular, and those such as Haught, on whom Teilhard had an instrumental influence; therefore, the first criteria has been satisfied. However, as this developmental view is considered, for the purposes of clarity, distinct issues require attention, for example, whether this evolving

world is considered teleological (either broadly teleological as with Haught and others who lean on the thesis of evolutionary convergence, or teleological after the sphere of intelligence has been penetrated – I argue in favour of the latter). Secondly, the question of how the divine is reflected in such an evolutionary worldview becomes important; a developmental vision of the world may correspond to evolutionary theory, but if it makes no reference to the divine it can hardly be considered theological. On this point, I have argued that the introduction of values to the world through the process of evolving ethics offers a glimmer into what Tillich terms ‘depth’ – that depth being the divine. The ambiguity of this notion was noted as a distinct caveat of this argument, however, it was noted that this caveat may stem from a cultural preoccupation with clarity – though this is not to say that we frivolously abandon the search for clarity, rather, it is an acknowledgement of subjective realities. Therefore, the natural evolution of morality is seen to be reflective of God’s values.

The third criterion is the requirement for a theological worldview grounded in evolutionary theory to provide a response to theodicy. This, I have suggested, can be found in Hick’s representation of Irenaeus and the vision that moral evil exists as a result of our incomplete moral development; morally, our species is still in its infancy. In this context, this response to theodicy was presented with a focus on moral evil and not natural evil, which will be discussed in the next chapter. Moreover, as Drees has pointed out, such an eschatological theodicy may diminish the importance of the present and our responsibility to react against injustice. This problem begets the fourth criterion; the need to appreciate our present responsibilities. In response to this, viewing our values as emergent from evolutionary ethics satisfies this criteria, because it places the responsibility on human consciousness. As argued in the previous chapter, evolutionary ethics demonstrates that our moral values are our responsibility; they were not established in an archaic society or provided by a primordial covenant. Rather, our moral values are the result of a long process

of evolution and are now governed by our own consciousness and free will. We are not being blindly led by genetic determinism nor are we bound by sacred laws; we are the commanders of our own moral code, and as with the second criterion, we can see God's values reflected through our evolved sense of right and wrong.

3.8 Conclusion

In congruence with evolutionary theory, there is evidence for a shift in theological thinking from viewing good and evil within the scheme of a fallen perfect creation, to conceiving a continuous creation; *creatio continua*. This changing of perspective was demonstrated in this chapter by highlighting five distinct theological themes and discussing how attitudes towards these themes can progress in light of evolutionary theory. The first of these themes was explored in section 3.1; the framework for understanding good and evil. Progress in evolutionary theory has made evident the fact that goodness is not latent in creation, as assumed in traditional theological and philosophical systems – an assumption which spawned the asymmetry of the theodicy question and inspired Augustine's portrayal of the fall; goodness was taken as a given, whilst evil required explanation. A new approach to understanding good and evil is evident amongst contemporary theologians such as Messer and Williams, who now appreciate sociobiology and how good and evil may only become intelligible concepts subsequent to the evolution of morality.

The second of these five themes was investigated in section 3.2, which discussed approaches to God's creative action that can be re-appropriated to be accommodative of an evolving world. Section 3.3 then discussed the third of these five themes; a move towards an eschatological picture of creation. In this approach, humanity is progressing towards perfection at the eschaton, rather than attempting to restore a historical perfection that went awry. Section 3.4 outlined an approach to the divine that was consistent with this renewed

evolutionary theological framework. This approach followed Haught in relying on Tillich's understanding of the divine as depth. Section 3.5 then explored how an evolutionary or developmental theology could provide a necessary response to the problem of evil. Sections 3.4 and 3.5 thus discerned the fourth and fifth respective theological themes which exhibit a decisive shift in contemporary theology post-evolutionary theory.

Furthermore, section 3.6 discussed the issue of how our present responsibilities could be appreciated within the context of a developmental worldview. Section 3.7 then outlined how various issues raised throughout the chapter culminated to satisfy four distinct criteria set forth in the introduction. The culmination of these points is illustrative of my own position with regard to a theological framework for morality that is appreciative of evolutionary ethics. The central argument of this thesis is to show how evolutionary ethics can provide a glimmer of hope in what may otherwise be considered a nihilistic world. In presenting this argument, this chapter has acknowledged the theological context within which this thesis rests, which is characterised by a marked emphasis on a continuing creation and development – an emphasis that is inspired in no small way by evolutionary theory.

CHAPTER FOUR:

A THEOLOGICALLY APPROPRIATED NATURALISTIC ONTOLOGY

4.0 Introduction

In Chapter Three, it was argued that a theological worldview, particularly one which seeks to provide a framework for our understanding of ethics, needs to provide a response to the theodicy question. In theologically appropriating descriptions of the world which in part stem from evolutionary theory, I argued that an appropriate response to theodicy can be found with the developmental aspects of John Hick's representation of Irenaeus; evil exists as a result of humanity's moral immaturity. However, I do not take this as an all-encompassing response to evil as whilst it responds the problem of moral evil, it is still susceptible to the problem of natural evil (although Hick does address natural evil, I will argue that his response is insufficient in that regard). Natural evil can be understood in this context as something which causes suffering/pain which is not the result of a moral action, for example, natural disasters. It should be noted that a strict separation between natural evil and moral evil is not always easily defined. Ambiguity may arise particularly in modern times where moral actions may have direct or indirect consequences exacerbating events which would have in previous ages been understood as natural evils. Humanity's technological developments have had at times detrimental effects on the Earth's natural workings and may have intensified various weather phenomena resulting in greater degrees of natural evil. Further ambiguities exist on the question of what constitutes a moral action or a moral evil; whether it is the intentions or consequences of an action, what degree of freedom the agent had, etc. – but addressing these questions is not of concern at this point.

In furtherance of outlining a theological position which appreciates our scientific knowledge of the world inclusive of evolutionary ethics, natural evil must be addressed in providing a response to the theodicy question. Although there have been multifarious responses to theodicy, what will be proposed here as a response to natural evil is a naturalistic or material ontology. I argue here that in light of philosophical reflections on science, and indeed theological considerations, the world can be understood as naturalistic or material; a view which may be defined as naturalism – a somewhat ambiguous term which needs further discussion. Therefore, section 4.1 will further outline my understanding of a naturalistic ontology. Distinct caveats and criticisms of a naturalistic ontology will also be considered in this section, but ultimately rejected. This section will also refer to recent developments in science to further demonstrate the coherence of a naturalistic ontology.

Theological arguments in favour of a naturalistic ontology will then be considered in section 4.2. A number of alternative possibilities will be considered, particularly in terms of models of divine action which my understanding of a naturalistic ontology precludes. Based upon weaknesses of these models, and more significantly, theological proposals in favour of precluding any mode of divine action (interventionist or non-interventionist), my understanding of a naturalistic ontology will be argued to be more theologically coherent than any model of divine action – noting that certain models of divine action may also be considered naturalistic. The problem of evil and the integrity of contingency will be presented in sections 4.2.2 and 4.2.3 respectively as theological reasons for adopting a naturalistic ontology. In section 4.3, I will then turn to the themes of kenosis, the autonomy of creation and atemporality in order to theologically appropriate a naturalistic ontology, given that it may be vulnerable to the criticism of making the divine superfluous.

Even though a naturalistic ontology can be theologically appropriated, it must also be acknowledged that this approach still may lead one to a nihilistic conception of the world.

An interpretation of inevitability may result from viewing everything in the universe including conscious thought as aspects of an unbroken causal chain of physical reactions; that all our actions/thoughts were inevitable. As I argued in the previous chapter, such inevitability/fatalism could be interpreted as nihilistic, if one accepts the premise that the significance of an inevitable world is less than an open-ended world. To avoid this conclusion, and suggest how a naturalistic ontology can be affirmed whilst also maintaining a non-nihilistic view of the world, I propose the cardinal argument of this thesis; that evolutionary ethics offers a glimmer of hope in what may be perceived as an otherwise nihilistic world. This argument will be presented in the next chapter. For now, the coherence of a naturalistic ontology with science and a particular theological approach will be presented, even if it leads to nihilism. An attempt to overcome this nihilism will be the task of the next chapter.

4.1 A Naturalistic Ontology: Overcoming its Discontents

As this chapter centres on the prospect of a theological appropriation and advocacy of a naturalistic ontology, it must be clearly articulated what is understood by this term. A naturalistic ontology, as understood here, is usually referred to as ‘naturalism’ of some sort; a term that is significantly ambiguous. As a starting point, a functional definition of naturalism has been provided by theologian David Ray Griffin, “naturalism is the doctrine that this causal web with its general causal principles cannot be interrupted from time to time.”⁴⁸⁶ Notwithstanding this functional definition, naturalism so construed has also been subject to a variety of further clarifying definitions. Griffin, for instance, distinguishes between a minimalist ‘nonsupernaturalist naturalism’ and a maximal ‘sensationalist, atheistic,

⁴⁸⁶ David Ray Griffin, *Two Great Truths: A New Synthesis of Scientific Naturalism and Christian Faith*, (London: Westminster John Knox, 2004) p. 2

materialist naturalism'.⁴⁸⁷ Willem Drees makes a distinction between 'soft, non-reductive naturalism' and 'hard reductive naturalism',⁴⁸⁸ whilst philosopher William A. Rottschaefer distinguishes between supernaturalistic naturalism and naturalistic naturalism.⁴⁸⁹ Indeed, each of these categories of naturalism can require further clarifications pertaining to whether such naturalism is methodological, epistemological, or ontological, and can further be interpreted as atheistic or theistic. Given that the term 'naturalism' thus clearly seems to have much plasticity, it needs to be clearly articulated what is meant when it is stated in this context. This section will thus outline what is meant here by a naturalistic ontology, and address various potential criticisms in order to further clarify my position.

A naturalistic ontology adopted in this work is an assumed ontology that echoes an approach established among the Greeks, particularly Aristotle, who endeavoured to understand the world by examining the 'why' of things, or in other words, causes.⁴⁹⁰ However, it is not an ontological naturalism as understood by scientists Karl Giberson and Mariano Artigas, as a position which denies the existence of anything which cannot be studied through the scientific method.⁴⁹¹ On the contrary, as will be discussed below, my version of a naturalistic ontology actually assumes the existence of something beyond the universe. A naturalistic ontology as understood here takes it that anything within the realm of the physical world can in principle be understood naturally, pertinently, the evolution of life and morality. The Aristotelian quest to understand the operations of the physical world by examining the relationship between cause and effect has been influential in the fact that it

⁴⁸⁷ Ibid., p. 26

⁴⁸⁸ Willem B. Drees, *Religion, Science and Naturalism*, (Cambridge: Cambridge University Press, 1996) p. 10

⁴⁸⁹ William A. Rottschaefer, 'How To Make Naturalism Safe for Supernaturalism: An Evaluation of Willem Drees' Supernaturalistic Naturalism', *Zygon: Journal of Religion and Science*, 36.3 (2001) pp. 407-453

⁴⁹⁰ Aristotle, *Physics*, Richard McKeon ed., *The Basic Works of Aristotle*, p. 240

⁴⁹¹ Karl Giberson and Mariano Artigas, *Oracles of Science: Celebrity Scientists Versus God and Religion*, (Oxford: Oxford University Press, 2007) p. 234

is a presupposition for modern scientific thinking; as Martin Heidegger wrote, “Without Aristotle’s physics, there would have been no Galileo.”⁴⁹²

Modern science, it is contested, has followed the assumptions of an unbroken chain of causality which can in principle, explain every phenomena in the universe. Although there are ‘gaps’ in our current understanding of this causal process, naturalism as understood here assumes that any non-natural or supernatural events are precluded. The continuing successes of science imply, as Ernan McMullin explains, an ontology.⁴⁹³ McMullin acknowledges that the ontology implied by science, which I understand as a naturalistic ontology, is incomplete and tentative.⁴⁹⁴ There are a number of reasons for this; we may view as a cautionary tale the proclamation of Lord Kelvin circa 1900 that there is nothing new left to discover in physics, shortly before Einstein’s revolutionary discovery of the photoelectric effect and his theory of special relativity. We should be aware of the provisional nature of any scientific worldview and not be too quick to assert our confidence in any one scientific picture, such as a particular naturalistic ontology. Moreover, following the sentiment of Karl Popper, it could be argued that a naturalist may never be able to definitively prove that all of the world’s phenomena are explicable naturalistically, as the criterion for the demarcation of truth may lie not with verification but with falsifiability.⁴⁹⁵ Popper himself explicitly warned against turning the convention of naturalism into a dogma.⁴⁹⁶

The naturalistic ontology adopted here infers from the successes of science that any phenomena can be explained naturally even if we cannot yet provide a natural explanation. The origin of life is an interesting example, given that heretofore, chemists and biologists

⁴⁹² Martin Heidegger, *The Principle of Reason*, trans. Reginald Lilly, (Indianapolis: Indiana University Press, 1991) p. 63 [Originally published 1957]

⁴⁹³ Ernan McMullin, ‘A Case for Scientific Realism’, Jarrett Leplin ed., *Scientific Realism*, (California: University of California Press, 1984) p. 9

⁴⁹⁴ Ibid., p. 9

⁴⁹⁵ Karl Popper, *The Logic of Scientific Discovery*, (New York: Routledge, 1959) p. 18

⁴⁹⁶ Ibid., pp. 52-53

have been unable to definitively explain beyond mere postulation how the first DNA or RNA molecules formed. However, on the naturalistic view, it is inferred that this formation occurred naturally, and not supernaturally as a result of divine action. This is inferred because almost all observed physical and chemical events seem to be open to natural explanation (even if one has not yet been found), and thus, there is no reason to assume that the significant event of the origin of life is any different. Yet it could be argued along with Hume that such inferences are naïve. Hume critiqued the assumptions we make regarding predictions of the future based on observations of the past by pointing out that there is no *a priori* reason why certain processes will have the same effect if repeated; the eating of bread may nourish a person today, but that does not ‘prove’ that it will nourish a person tomorrow.⁴⁹⁷ Similarly, just because all observed events seem to have natural explanations, does not mean that all events will always have natural explanations. One could consequently, for these and other reasons, reiterate John Locke’s suggestion that a definitive scientific understanding of the world, and thus an exhaustive scientific naturalism, is strictly speaking beyond our grasp.⁴⁹⁸

There are also further considerations such as the debate over whether what we perceive through science is an accurate representation of reality. Acknowledging this question, it could be argued somewhat tentatively that whilst we can be aware of the limitations of our grasp on knowledge, science can provide a good approximation of reality.⁴⁹⁹ Being aware of these limitations and caveats does not require that the scientific or naturalistic enterprise be abandoned; rather, it merely suggests that we proceed with caution and in a somewhat Socratic fashion, agree to perennially demand that such assumptions hold up to scientific and philosophical scrutiny. Bertrand Russell for example, suggested that

⁴⁹⁷ David Hume, *An Enquiry Concerning Human Understanding*, Peter Millican ed., (Oxford: Oxford University Press, 2007) pp. 24-25 [Originally published 1748]

⁴⁹⁸ John Locke, *An Essay Concerning Human Understanding*, Roger Woolhouse ed., (London: Penguin, 1997) p. 307 [Originally published 1690] p. 450

⁴⁹⁹ For an example of such discussion, see Ernan McMullin, ‘A Case for Scientific Realism’

whilst an absolute truth about reality may be ultimately unattainable, science can provide a technical truth useful for making predictions – it gives an approximation of reality.⁵⁰⁰ Though even then, the ambiguity of the notion of a ‘technical’ or ‘approximate’ truth raises further issues, as McMullin suggests, it raises the question of ‘how approximate’.⁵⁰¹

Whilst being mindful of these caveats pertaining to adopting a naturalistic worldview, it is argued here that a naturalistic ontology understood as precluding supernaturalism is an appropriate position based on the coherence and successes of science. The universe is assumed to obey laws which are in the still incomplete process of being fully understood by the sciences in respective disciplines. The universe is, on this understanding of naturalism, fully explicable in terms of these laws even if we are not yet fully aware of them. All that exists in the universe can be understood in terms of their physical constituent atoms, sub-atomic particles, or further constituents that are as of yet unknown; quantum fields, superstrings and the like. In this respect, I also follow Drees when he asserts that naturalism can be understood as a close synonym of ‘hard naturalism’, ‘physicalism’, ‘materialism’, and ‘physical monism’; all that exists in the world, again including moral thought, is made up of one substance, matter.⁵⁰² This form of naturalism can be distinguished from that of Griffin, who finds such a view severely limited in scope and opposed to a theological view, as we shall see in section 4.2.⁵⁰³ Such a naturalistic outlook of the world is not unique to modern science; it echoes the thought of the Greek atomists such as Leucippus and Democritus (though not Aristotle, who rejected the physical theories of the atomists and Plato).⁵⁰⁴ In modern times, it can be stated that science’s continuing predictive and cumulative success provides a strong basis for asserting (or re-asserting) that

⁵⁰⁰ Bertrand Russell, *Religion and Science*, (Oxford: Oxford University Press, 1997) p. 15 [Originally published 1935]

⁵⁰¹ Ernan McMullin, ‘A Case for Scientific Realism’, pp. 35-36

⁵⁰² Willem B. Drees, *Religion, Science and Naturalism*, p. 11

⁵⁰³ David Ray Griffin, *Two Great Truths*, p. 2

⁵⁰⁴ G.E.R. Lloyd, *Early Greek Science: From Thales to Aristotle*, (London: Chatto and Windus, 1970) p. 102

the contingency of the universe is steadfast, even if this position may be vulnerable to the critiques of naïvety *a la* Hume, Popper and others.

Although the naturalistic ontology advanced here uses the coherence and success of science as an argument for its validity, it also must be acknowledged that it is ultimately a metaphysical position. Drees, who advocates a naturalistic approach, thus asserts that naturalism necessarily goes beyond the details provided by science in assuming a wider view of reality.⁵⁰⁵ Scientific naturalism is scientific in the sense that it is based upon, or perhaps inspired by science. Yet it is not scientific in the sense that it cannot be demonstrably proven through experimentation. One cannot escape the confines of the universe in order to conduct an experiment on its nature; all of the knowledge on which naturalism is predicated stems from inside the world. Therefore, it must be considered ultimately a philosophical position, indeed one which may seem difficult for a theologian to adopt. Therefore, five distinct objections to a naturalistic viewpoint will now be addressed; irreducibility, mind-body causation, self-reference, matter, and atheism. Of course, this is not an exhaustive review of potential critiques of naturalism, but rather an attempt to further clarify the naturalistic approach adopted here and to address issues which are pertinent in this context.

Irreducibility

As stated above, a distinct aspect of the naturalistic ontology espoused in this chapter, assumes that everything in the universe can be ultimately realised in terms of reduction to material components. This assumption lies at the heart of the scientific method; the idea that there is no external quality at work. However, on certain issues which we experience as intangible, such as love, music, poetry, or pertinently, freedom and morality, a degree of

⁵⁰⁵ Willem B. Drees, *Religion, Science and Naturalism*, p. 11

scepticism may arise with regard to reductionism. In espousing a naturalistic view, Drees outlines six premises which characterise his naturalistic position, three of which concern reduction; *constitutive reductionism* (that the world is in a unity in that all entities are made of the same constituents), *physics postulate* (that physics offers us the best available description of the constituents of the natural world) and *conceptual and explanatory non-reductionism* (that the description and explanation of phenomena may require concepts which do not belong in the vocabulary of fundamental physics).⁵⁰⁶ On this view, a Shakespearian sonnet or Beethoven symphony can ultimately be realised in the form of ink and paper, or vibrating strings and sound waves, which in turn can be ultimately understood in terms of atoms (as with constitutive reductionism and physics postulate). However, in terms of conceptual and explanatory non-reductionism, it is acknowledged that such entities require explanations that are beyond fundamental physics – explanation through literary theory, musicology, or more commonly, in terms of subjective human experience and emotion, even if ultimately, such events are atomic interactions. Daniel Dennett, who advocates a similar approach to reductionism, describes as preposterous the notion that one could critically compare Keats and Shelly from a molecular perspective; the higher level sciences are not at risk of being abandoned in favour of lower-level physics, even if at bottom, anything can be understood in terms of lower-level physics.⁵⁰⁷

Despite these stipulations, reductionism in its various forms – such as conceptual and explanatory non-reductionism (discussed above) or nonreductive physicalism (which will be discussed in the next chapter) for example – has still been viewed with suspicion by philosophers/theologians such as Griffin.⁵⁰⁸ Griffin worries that a reductionist understanding of the human mind in particular makes subjective experiences of conscious thought

⁵⁰⁶ Willem B. Drees, *Religion, Science and Naturalism*, p. 16

⁵⁰⁷ Daniel C. Dennett, *Darwin's Dangerous Idea*, p. 81

⁵⁰⁸ For discussion on 'nonreductive physicalism', see Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, p. 32

superfluous.⁵⁰⁹ A resultant implication of reductionism is for Griffin and others, the potential elimination of the notion of free will, a prerequisite for morality (this criticism of reductionism is akin to that which was held against evolutionary explanations of morality in section 2.3). However, it will be argued specifically in the next chapter, that such material reduction does not preclude the subjective experience of freedom. In addition, such reservations about material reduction again underestimate the significance of the concept of emergence, which was also discussed in further detail in section 2.3. Therefore, it is argued here that naturalism, whilst indeed being reductionist, does not deny the realities of subjective experiences, such as music, poetry or freedom – certain properties can be emergent and thus inexplicable directly in terms of the fundamental sciences, though again ultimately there are no forces at work other than those of fundamental physics.

Mind-Body Causation

As stated, I roughly equate a naturalistic view of the world with a material view of the world. With regard to the natural sciences, such a view is often assumed; as Bertrand Russell states, a material view is almost synonymous with science.⁵¹⁰ Notwithstanding, on certain issues such as the human mind/consciousness, a material understanding is often more contentious. Griffin, for example, presents the concept of conscious thought as indicative of a fatal problem for a material outlook, “Materialists still face the problem of how a brain consisting of nonexperiencing neurons could produce conscious experience.”⁵¹¹ Similar scepticism regarding a material understanding of consciousness has also been articulated by scientists and philosophers such as Paul Davies, Bernard d’Espagnat and more recently

⁵⁰⁹ David Ray Griffin, *Religion and Scientific Naturalism: Overcoming the Conflicts*, (New York: State University of New York Press, 2000) pp. 76-81

⁵¹⁰ Bertrand Russell, ‘Materialism, Past and Present’, Robert E. Egner and Lester E. Denonn eds., *The Basic Writings of Bertrand Russell*, p. 211[Originally published 1925]

⁵¹¹ David Ray Griffin, *Two Great Truths*, p. 23

Thomas Nagel.⁵¹² To substantiate his critique of a material view of mind, Griffin points to the problem of mind-body causation. He feels that materialism cannot explain how mental experience can have a causal effect on the physical body.

Griffin also discusses the implications that naturalism/materialism may bring for the issue of freedom (also alluded to above). Griffin expresses his belief that based on a physicalist understanding of science, free will must be illusory. In a world consisting of mindless physical particles, there could be no place for free will.⁵¹³ The similar issue of sentience has also been cited as a key problem for a materialist vision, and as a result, theologians such as Richard Swinburne have suggested that only God's actions can solve the mind-body problem.⁵¹⁴ For Griffin to overcome these issues (the mind-body causal problem, and the issue of free will), he leans on Whitehead's non-materialist 'panexperientialism' which he roughly summarises as the doctrine that all things including particles of matter have some level of experience.⁵¹⁵ Of course this is not conscious experience, but rather an understanding that atoms for instance, may be conceived as relative to our minds – such a view has also been expressed by physicists such as d'Espagnat.⁵¹⁶

These objections to a material worldview are important as they present a challenge to the version of naturalism adopted here; it must be expressed how the naturalistic ontology can coherently account for the existence of mind/consciousness. On a terminological note, I use the term 'mind' both for brevity and for the purposes of comparing two views, as strictly speaking, when I use the term 'mind' I use it as a synonym for mental phenomena as opposed to an entity in itself (which is how Griffin et al. presumably understand it given their opposition to reductionist views of the mind). Here, I argue that the model of

⁵¹² Paul Davies, *The Mind of God*, p. 232; also, Bernard d'Espagnat, *Reality and the Physicist*, (Cambridge: Cambridge University Press, 1989) p. 212; also, Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*, (Oxford: Oxford University Press, 2012)

⁵¹³ David Ray Griffin, *Two Great Truths*, p. 24

⁵¹⁴ Richard Swinburne, *The Evolution of the Soul*, (Oxford: Clarendon, 1986) pp. 198-199

⁵¹⁵ David Ray Griffin, *Two Great Truths*, p. 78

⁵¹⁶ Bernard d'Espagnat, *On Physics and Philosophy*, (New Jersey: Princeton University Press, 2006) p. 268

consciousness outlined by Daniel Dennett satisfies a naturalistic/material view of the mind. Dennett, in opposition to Griffin, actually uses the ‘mind-body causality problem’, what Schopenhauer called the ‘world knot’, as the fatal flaw of Cartesian dualism,⁵¹⁷ a critique also echoed by the philosopher of mind Jaegwon Kim.⁵¹⁸

Dennett is consequently in favour of a material view of the mind; that the mind is comprised of matter which is subject to the laws of the natural sciences.⁵¹⁹ For Dennett, the mind is the brain. In order to explain how mindless entities, atoms, etc. can produce the apparent phenomenon of conscious thought, Dennett puts forth a model of consciousness he labels the ‘multiple drafts model’.⁵²⁰ He suggests that in the brain, a multitude of processes interpreting sensory perception operate in parallel. There is no one centre, no locus of consciousness which could be called the ‘I’ (which Descartes postulated to exist in the pineal gland of the brain). The efficacy of these multiple drafts gives the impression of a single unit, because they have evolved to work well in tandem. Therefore, the intricate integration and assimilation of mindless physical properties can account for the experience of mind or conscious thought, and is thus consistent with a material/naturalistic ontology.

Given our understanding of evolution, there is also no reason other than general intuition why we should expect any aspects of our being, including our minds, to be different from the properties dealt with by physics and chemistry – though as noted above, this is not to say that mental life is not different in some senses; it clearly has more complex forms of organisation and thus cannot be fully explained without recourse to higher-level systems of analysis. The bio-mechanical processes of genetic replication and the processes of natural selection have led to the evolution of the human mind in the same way in which it has led to the evolution of any other feature of the biosphere; through a long cumulative

⁵¹⁷ Daniel C. Dennett, *Consciousness Explained*, p. 35

⁵¹⁸ Jaegwon Kim, *The Philosophy of Mind*, 2nd ed., (Oxford: Oxford University Press, 2006) p. 44

⁵¹⁹ *Ibid.*, p. 33

⁵²⁰ *Ibid.*, p. 111

process leading to greater degrees of complexity.⁵²¹ Similarly, as discussed in Chapter Two, this process also resulted in the evolution of human morality. By incorporating Dennett's views on the material realisation of consciousness, an exhaustively naturalistic ontology can be defended, one which pertinently in this context, includes moral thought and behaviour (through sociobiological theory discussed in Chapter Two).

Self-Reference

A further potential critique of a naturalistic worldview is the issue of self-reference. As stated above, the naturalistic position as adopted here is based upon the successes of a scientific appreciation of the natural world and physical processes. An issue arises with this naturalistic position when it is considered that our knowledge of the physical processes stem from the physical processes themselves. If our experience of physical processes is understood as another physical process, then our attempt to understand physics is in some respects, physics trying to understand itself. Therefore, our understanding of the physical processes cannot be separated from the physical processes under investigation, perhaps highlighting an intrinsic subjectivity in scientific investigations. Bertrand Russell makes this point when discussing materialism:

[T]he data of physics are sensations, which are infected with the subjectivity of the observer. Physics seeks to discover material occurrences not dependent upon the physiological and psychical peculiarities of the observer. But its facts are only discovered by means of observers, and therefore only afford data for physics in so far as means exist of eliminating the observer's contribution to the phenomenon.⁵²²

Such objections to materialism (in this context, taken as a close synonym of naturalism) are for Russell insurmountable when it comes to developing a metaphysical system (though he

⁵²¹ Daniel C. Dennett, *Darwin's Dangerous Idea*, p. 371

⁵²² Bertrand Russell, 'Materialism, Past and Present', p. 219

notes materialism's practical use in deciphering scientific laws), "(materialism) cannot be regarded as definitely true without a wholly unwarranted dogmatism."⁵²³

Notwithstanding this inherent subjectivity, such limitations regarding an espousal of a naturalistic ontology do not fully discount the strong case that can be made for naturalism, namely the coherence and successes of science in predicting future events. Indeed, the scepticism regarding the subjectivity of our knowledge is not limited to science; the scepticism of Descartes, for example, outlined how there may be no compelling argument to assume that any of our perceptions accurately reflect reality.⁵²⁴ This problem may be particularly acute for a naturalistic/material ontology, given that it views our understanding of physical events as physical events themselves. Similar caveats are discussed by Drees, who also notes the impossibility of an independent justification of naturalism because naturalism is all-encompassing; there is no place outside of naturalism from which naturalism can be evaluated.⁵²⁵ Although such caveats can be duly acknowledged, it is argued here, following from Drees, that we cannot do better than use the best available knowledge and thus build upon stable insights from science in espousing naturalism.⁵²⁶ A naturalistic ontology, like any position among others, is not perfect, though a case is made here for its coherence and its adoption from a theological perspective.

Matter

A further problematic aspect of the adoption of a naturalistic ontology, particularly as it is understood as a close synonym of a material ontology, is the division among the scientific community on the nature of matter itself. Physicists Paul Davies and John Gribbin, for example, argue in their work *The Matter Myth*, that the advent of quantum physics early in

⁵²³ Ibid., p. 220 [parenthesis mine]

⁵²⁴ René Descartes, *Treatise on Light*, Stephen Gaukroger trans. and ed., *The World and Other Writings*, (Cambridge: Cambridge University Press, 2004) p. 3 [Originally published 1633]

⁵²⁵ Willem B. Drees, *Religion, Science and Naturalism*, p. 16

⁵²⁶ Ibid., p. 12

the twentieth century has revealed matter to be far less substantive than we might believe.⁵²⁷ Modern physics, Davies and Gribbin argue, portrays matter as more elusive than the materialist model; it behaves in “nonlinear” and “seemingly miraculous ways”. Elsewhere, Davies explains how various features cardinal to physics, such as atoms and subatomic particles, “inhabit a shadowy world of half-existence.”⁵²⁸ Thus, Davies and Gribbin title the first chapter of their work ‘The Death of Materialism’.⁵²⁹ This may be a distinct caveat of adopting a naturalistic framework. Indeed, advocates of materialism must acknowledge that there is much about matter we do not yet fully understand. Perhaps then, a serious caution must be adopted; is it wise to adopt an ontology based on an as of yet incomplete knowledge of the very basic components of science? In this regard, Davies and Gribbin advise such caution. They note that, for example, until the nineteenth century, physicists assumed the existence of ether which filled space, something which the paradigm shift following Einstein’s elucidation of relativity proved false.⁵³⁰ Therefore, to reiterate a theme also raised earlier, we should not assert too much confidence in what we think we know.

In a similar regard, there are numerous examples of areas in science in which consensus on issues consequential for our general view of reality has not been reached; a full appreciation of the nature of quantum physics, for example. Moreover, there may be theories which form part of the consensus view at present which will be superseded in the future, similar to the concept of ether, or substantially revised, such as understandings of gravity and atoms. Despite the provisional nature of science, the wider picture assumed by the naturalistic ontology adopted here (a closed causal system), will be assumed not to change. For example, physicists such as Stephen Hawking and Leonard Mlodinow have recently defended an amalgamation of various theories known as M-theory, which they feel gives us

⁵²⁷ Paul Davies and John Gribbin, *The Matter Myth: Beyond Chaos and Complexity*, (London: Penguin, 1991) p. 8

⁵²⁸ Paul Davies, *The Mind of God*, p. 85

⁵²⁹ Ibid., p. 8

⁵³⁰ Paul Davies and John Gribbin, *The Matter Myth*, p. 19

a complete picture of the physical nature of reality.⁵³¹ An analysis of the merits of such a view is beyond the scope of this thesis and indeed, perhaps beyond the gift of the theologian or philosopher (despite the fact that it may indeed have implications for them). The programme of Hawking and Mlodinow rests on the same assumption of a naturalistic ontology; that the world is a closed causal system. It may be that M-theory will be superseded in the future, but if the naturalistic ontology holds, then the new theory would still adhere to the principles of naturalism; a closed causal web. Moreover, even if an element of genuine randomness exists, within quantum physics for instance, it would be argued that the world's causal system is still not susceptible to outside interaction. Despite many scientific revolutions and paradigms, this naturalistic ontology has hardly changed since the ancient Greeks, and still provides, it is argued, the most appropriate outlook on the world in light of the predictive successes of science, even if a degree of caution is duly acknowledged on the issue of matter itself.

Atheism

As stated above, the naturalistic ontology assumed in this chapter can be roughly equated to materialism or physicalism. Naturalism so supposed has in turn been equated by scholars such as Griffin to what he terms sensationist, atheistic, materialistic naturalism. This brand of naturalism, he suggests, is incompatible with religious belief.⁵³² Contrary to this assertion, the naturalistic/material ontology assumed here is not atheistic, it merely assumes that no supernatural or spiritual realm interacts with this world. In fact, in following this naturalistic ontology to its logical conclusion, we encounter what Drees terms 'limit questions'.⁵³³ Questions arise at the boundaries of science such as why there is something rather than

⁵³¹ Stephen Hawking and Leonard Mlodinow, *The Grand Design: New Answers to the Ultimate Questions of Life*, (London: Bantam, 2010) pp. 116-119

⁵³² David Ray Griffin, *Two Great Truths*, p. 26

⁵³³ Willem B. Drees, *Religion, Science and Naturalism*, p. 18

nothing, or why the universe is lawful, as Einstein stated, the fact that the world is comprehensible is a miracle.⁵³⁴ In this regard, it is understood here that a naturalistic ontology cannot just leave room for, but actually be consistent with a transcendent God; though I do not seek to advance that argument here. On this issue, the theological aspect of my version of a naturalistic ontology becomes implicit; with respect to limit questions, I hold a stronger view than the agnostic stance of other ‘religious naturalists’ such as philosopher Jerome A. Stone, whose approach is essentially atheistic, though he acknowledges the value in using religious language.⁵³⁵

A naturalistic ontology may indeed preclude particular theological concepts such as God’s providential action. The preclusion of such action for Griffin, does not do the Christian tradition justice.⁵³⁶ Yet, it is argued here, that a naturalistic ontology with the notion of a transcendent realm implied by the limits of the ontology aligns more with theism than atheism, despite the fact that such theism may not be representative of the understandings of God portrayed in particular religious traditions – indeed, there is no *a priori* reason to assume that it should; religious texts such as the Bible are understood in most Christian denominations to rely on myth and reflect the level of scientific knowledge of the period, which precedes modern science by millennia. However, it will also be argued in section 4.3 that the transcendent God viewed as consistent with a naturalistic ontology can also be seen as consistent with a particular interpretation of God as portrayed in the Christian narrative.

To summate, the naturalistic ontology espoused in this chapter is one which is inspired by natural philosophy and modern science, though this approach is taken with due caution. Five caveats were addressed to demonstrate that this approach is not naïvely

⁵³⁴ Taken from the German phrase, *In diesem Sinne ist die Welt unserer Sinneserlebnissen begreifbar, und dass sie es ist, ist ein Wunder*, Albert Einstein, ‘Physik und Realitat’, *Journal of the Franklin Institute*, 221.3 (1936) p. 315

⁵³⁵ Jerome A. Stone, *Religious Naturalism Today: The Rebirth of a Forgotten Alternative*, (Albany: State University of New York Press, 2008) pp. 225-226

⁵³⁶ David Ray Griffin, *Two Great Truths*, p. 26

adopted, but rather the result of careful and critical reflection on science and philosophy. The key feature of the naturalistic ontology as pertinent in this theological thesis is that the world is a closed causal system which is not vulnerable to interaction from the outside, namely, from a divine realm. Whilst it is acknowledged that there are ‘gaps’ in the scientific picture of this causal system, it is assumed that these gaps are at least in principle explicable through scientific analysis of causation. Moreover, the naturalistic ontology advocated here is not atheistic, but rather, implicitly theistic (or at least, deistic), given that we ultimately encounter ‘limit questions’.

The Coherence of a Naturalistic Ontology with Modern Science

Recent developments in science give extra weight to the continuing understanding of all aspects of the world, including conscious thought, as physical. The naturalistic ontology of the ancient Greek atomists can still be maintained in light of modern science. To illustrate, three brief examples can be given. Firstly, the advent of recent developments in brain-computer interfaces may be interpreted as human thoughts being ‘read’ by computer programmes.⁵³⁷ Of course, such developments cannot be considered ‘proof’ that human thoughts are ‘readable’ and thus physical. Hume’s criticism of inference again becomes apparent; there is nothing to necessarily preclude an immaterial feature causing the physical reactions of the brain which can be subsequently ‘read’. Notwithstanding this point of caution, the ability to ‘read’ human thought, however elementary such technology is, would be consistent with a material understanding of consciousness, and thus coherent with a naturalistic ontology. A second development pertains to the advances made in constructing an artificially conscious system. In his explication of his material view of consciousness, Dennett suggested that if such a model of consciousness was to hold true, then an artificially

⁵³⁷ See Dennis J. McFarland and Jonathan R. Wolpaw, ‘Brain-Computer Interfaces for Communication and Control’, *Communications of the ACM*, 54.5 (2011); also, Luis Fernando Nicolas-Alonso and Jaime Gomez-Gil, ‘Brain Computer Interfaces, a Review’, *Sensors* 12.2 (2012)

conscious machine was a legitimate possibility given that there is no nonmaterial element of consciousness.⁵³⁸ Although a machine with the same degree of consciousness as a human has not yet been realised, projects such as the ‘Blue-Brain Project’, a supercomputer attempting to mimic a mammalian brain, are making progress towards that goal.⁵³⁹ A third example is the first synthetically created living cell by a team led by American scientist Craig J. Venter in 2010.⁵⁴⁰ Though not specific to the issue of consciousness/mind, the creation of synthetic life provides further substance to the argument that life is material and has no non-natural component thus again being coherent with a naturalistic/material ontology.⁵⁴¹

Consequently, based on the overall coherence of the naturalistic picture of the world as portrayed through the natural sciences, perhaps taken as an updated version of Aristotelian causality or Democritean atomism, it is suggested that this ontology be adopted. Though distinctive criticisms of the naturalistic ontology can be acknowledged, several of the more prominent of which are present above, no such criticisms seem to pose a strong enough challenge to discount such a view. In fact, recent developments in science and technology, whilst not presenting definitive proofs, seem to add further significant weight to the coherence of a naturalistic/material worldview. In addition to the scientific coherence of a naturalistic ontology, it is also contested here that a naturalistic ontology is more theologically coherent.

⁵³⁸ Daniel C. Dennett, *Consciousness Explained*, p. 214

⁵³⁹ Henry Markram, ‘The Human Brain Project’, *Scientific American*, 306.6 (2012) pp. 50-55

⁵⁴⁰ Daniel G. Gibson et al., ‘Creation of a Bacterial Cell Controlled by a Chemically Synthesized Genome’, *Science*, 329.5987 (2010) pp. 52-56

⁵⁴¹ Acknowledging of course the ‘non-material’ elements involved in its creation, namely, the conscious intentions of the scientists involved, though this does not take away from the point that the life itself is comprised of purely natural elements.

4.2 The Coherence of A Naturalistic Ontology and Theology

As asserted above, the naturalistic ontology assumed in this chapter is steadfast to the point where the causal processes are never violated by a spiritual, transcendent or divine realm.⁵⁴²

On a first reading of this statement, it may be understood as conflicting with any theological appreciation of the world as it seems to preclude any divine involvement in the world, through miracles or other forms of divine action. Therefore, a naturalistic ontology such as that adopted here, has often been seen as antithetical to a religious worldview; the association of naturalistic materialism with science and of supernaturalism with religion has formed the basis for much apparent conflict between science and religion, as Griffin notes, “Given this twofold equation (the association of naturalism with science and supernaturalism with religion), the ‘scientific worldview’ necessarily conflicts, in various ways, with the worldview presupposed by religious believers.”⁵⁴³ Although Griffin himself believes that this conflict can be overcome, depending on further clarifications on what is meant by ‘naturalism’ and ‘supernaturalism’, he and others would still perhaps argue that the naturalistic ontology adopted here would indeed conflict with a religious outlook, given Griffin’s critiques of similar perspectives.⁵⁴⁴

In order to illustrate how a naturalistic ontology can be coherent with a theological view, prominent alternative models of divine action will be considered in section 4.2.1, but ultimately rejected. Aside from particular weaknesses in these models themselves, a theological argument against any model of divine interaction will then be outlined based on the theological problem of evil and the integrity of creation, discussed in sections 4.2.2 and

⁵⁴² A note on language here; in explicating this view, it might be unintentionally applying a negative stigma either to divine action or the prospect of no divine action. One could say that the naturalistic ontology *denies* divine action, which may read as a negative appropriation of the naturalistic ontology, as the term ‘deny’ may read as having negative connotations. Conversely, one could say that the integrity of the natural ontology is such that it cannot be broken, which may imply a negative appropriation of divine action in that it ‘breaks the integrity’ of the natural world. I am bound by language in this regard, and whilst I have chosen to explicate my view in the latter way, my intentions are to present a balanced view, though one which ultimately rests on a naturalistic ontology.

⁵⁴³ David Ray Griffin, *Religion and Scientific Naturalism*, p. xv

⁵⁴⁴ For example, David Ray Griffin, ‘A Richer or Poorer Naturalism? A Critique of Willem Drees’ *Religion, Science and Naturalism*, *Zygon: Journal of Religion and Science*, 32.4 (1997)

4.2.3 respectively. I consciously use the term ‘interaction’ as opposed to the term ‘intervention’ given that certain models of divine interaction (which will be discussed below) are specifically presented in certain contexts as non-interventionist. I use the term ‘interaction’ in a broader sense to encompass both interventionist and non-interventionist models of divine action, all of which are rejected in my approach.

4.2.1 Alternative Possibilities

Although I argue that a naturalistic ontology precludes intermittent divine involvement in the world, what is perhaps more common is to persist in postulating some form of direct divine interaction with the world – again, note that divine interaction can be differentiated from divine intervention; certain models of divine interaction (e.g. through indeterminacy or whole system interaction) could be considered naturalistic given that they do not conflict with the laws of nature, though these views are also precluded on my understanding of a naturalistic ontology. To illustrate, four examples will be briefly considered; miracles, indeterminacy, mental interaction, and whole-system causation. This is not an exhaustive review of models of divine action. A complete critical review of the body of work presented by the various theorists in question, and the nuances of their proposals, is beyond the scope of this work.⁵⁴⁵ My brief illustration of such models serves only to further articulate my own position by way of contrast with other prominent positions, some of which could be considered naturalistic. It will also be stated why other prominent views are ultimately repudiated here, thereby strengthening my own position.

⁵⁴⁵ A good summary however, can be found in the volume edited by Robert John Russell, Nancey Murphy and Arthur Peacocke; *Chaos and Complexity: Scientific Perspectives on Divine Action*, 2nd ed., (Vatican City: Vatican Observatory Press, 2000)

Miracles

A traditional if ambiguous model for understanding divine interaction with the world is the concept of miracles. Indeed, miracles could also be used as a blanket term which encompasses all models of divine interaction, including those to be discussed below. For present purposes, miracles will be assumed to be an expression of God's omnipotence by causing an occurrence which is inconsistent with the natural causal process, or as John Polkinghorne states, is "... radically unnatural in terms of prior expectation."⁵⁴⁶ Such an understanding of miracles is akin to the oft cited definition put forth by Hume; that miracles are a transgression of the laws of nature.⁵⁴⁷

It is assumed here that within the framework of a naturalistic ontology, the natural laws are never transgressed. Again, the predictive success and continuing developments of science seem to cohere with the perspective that the laws of nature are exceptionless. Theologically too, there are substantial reasons to espouse a naturalistic ontology and discredit miracles. For example, Aquinas discussed the idea that having created the laws of nature, God cannot act against himself, "God the author of all natures does nothing against nature."⁵⁴⁸ If one were to allow for the opposite, a perplexity arises; if God created the world as lawful, why would God then interrupt God's own laws? Would this not undermine God's creation? Theologian Wolfhart Pannenberg elaborates on this point by arguing that the idea of a miracle construed as Hume's idea of something which violates the laws of nature is a self-defeating concept.⁵⁴⁹ He articulates the premise as follows:

The logic of the concept of natural law requires that there be no exceptions – otherwise the pretended law in question would turn out not to be truly a law of

⁵⁴⁶ John Polkinghorne, 'The Credibility of the Miraculous', *Zygon: Journal of Religion and Science*, 37.3 (2002) p. 751

⁵⁴⁷ David Hume, *An Enquiry Concerning Human Understanding*, p. 127

⁵⁴⁸ Thomas Aquinas, quoted in Wolfhart Pannenberg, 'The Concept of Miracle', *Zygon: Journal of Religion and Science*, 37.3 (2002) p. 760

⁵⁴⁹ *Ibid.*, p. 759

nature. The concept of miracle as a violation of natural law subverts the very concept of law and in effect exposes the futility of the assertion of miracles.⁵⁵⁰

The notion of a law implies universality, otherwise it would not be a law but rather a tendency or habit; the notion of a law may be undermined if such a law can be readily violated. Furthermore, Pannenberg explains that the concept of a miracle as a violation of the laws of nature is a relatively recent understanding, arising only subsequent to the medieval period.⁵⁵¹ If the laws are understood to have come from God as Creator, the notion of a miracle may violate Gods' self, as in the sentiment of Aquinas. Thus, it may be more logically coherent to assume that the laws are not broken as with the naturalistic ontology. This theme will also resurface in section 4.2.3.

However, an argument could be presented to the contrary. It may be stated that there is no *a priori* reason to insist that an intervention in the physical laws constitutes an undermining of such laws. Keith Ward, for example, finds arguments based on the inalienability of physical laws ill-founded. He suggests that rather than interpret the laws of nature as universal and absolute, they could be interpreted as useful general principles.⁵⁵² Ward finds the arguments of theologians such as Rudolf Bultmann, who sought to demythologise the Christian tradition,⁵⁵³ "extremely odd" if God is taken as a personal entity.⁵⁵⁴ For Ward, the personal character of God offers justification for some occurrences to transcend general law-like principles; human experience is rarely clear-cut, but often exists in a blur of grey areas. Why should God and his laws be any different? In contrast to Ward's suggestion that physical laws may be better conceived of as general principles, it is understood here that given the coherence of a naturalistic ontology with scientific and philosophical principles of causality, a stronger case can be made in favour of unalterable

⁵⁵⁰ Ibid., p. 759

⁵⁵¹ Ibid., p. 760

⁵⁵² Keith Ward, 'Believing in Miracles', *Zygon: Journal of Religion and Science*, 37.3 (2002) p. 743

⁵⁵³ Rudolf Bultmann, *Jesus Christ and Mythology*, (London: SCM, 1966) p. 15 [Originally published 1958]

⁵⁵⁴ Keith Ward, 'Believing in Miracles', p. 742

laws. Moreover, as Bultmann points out, the understandings of the world presented in the New Testament for example, are pre-scientific and therefore we should be aware that we cannot expect the biblical texts to live up to the same degree of scientific scrutiny we employ in our current worldview; in short, there is no reason to assume that the supernatural events of the New Testament transpired in any historical or literal way.⁵⁵⁵

Indeterminacy

The general understanding of miracles as discussed above is significantly problematic, both in terms of the theological argument in favour of the integrity of God's creation evident in Aquinas, and also from the scientific/philosophical image of causality. However, arguments in favour of the divine realm directly and fruitfully engaging with the physical world have been put forth which do not consider such action as contravening the physical laws. One such approach has been to interpret the apparent indeterminacy in physical laws evident through quantum physics or chaos theory as evidence that the world is not purely mechanistic as a material ontology would perhaps assume. John Polkinghorne, for example, illustrates that a fully causal and mechanistic world makes God redundant, limiting his action to the initial construction of the cosmic machine.⁵⁵⁶ One chief reason for Polkinghorne's rejection of such a view is the twentieth century discoveries of quantum theory and chaos theory, "The widespread intrinsic unpredictabilities that these theories entail show that the physical world is not simply mechanical..."⁵⁵⁷ Quantum theory, for Polkinghorne, illustrates a degree of plasticity regarding the causal nexus of the world. He states that physical reality as understood from quantum theory is an exquisitely sensitive

⁵⁵⁵ Rudolf Bultmann, *Jesus Christ and Mythology*, p. 15

⁵⁵⁶ John Polkinghorne, *Faith, Science and Understanding*, (New Haven: Yale University Press, 2000) p. 109

⁵⁵⁷ *Ibid.*, p. 110

system, which signals that “ontologically much of the physical world is open and integrated in character.”⁵⁵⁸

Following from this, the openness of the causal nexus might allow for God to act in the world without violating the natural laws, given that the natural laws are not closed systems. Quantum uncertainty may allow God to act in a way that is non-interventionist, as Gods’ actions would not be contradicting laws, but rather working through the open laws, “within the grain of nature, rather than interventionally against it.”⁵⁵⁹ If quantum theory illustrates an indeterminate system, then God’s acting through such indeterminacy would not be *contra naturam*, and thus the integrity of the physical laws would be maintained, making prevalent the difference between divine interaction and divine intervention, a point stressed by Robert John Russell.⁵⁶⁰ Therefore, envisioning divine action through indeterminacy would not be divine action in the traditional understanding of a miracle defined by Hume as a transgression of nature. Such a view has proved appealing, and has thus been adopted in varying degrees and guises, and with various nuances by theologians and scientists such as Russell⁵⁶¹, Nancey Murphy and George Ellis⁵⁶², Karl Giberson and Francis Collins⁵⁶³, amongst others.

Contrary to prospect of direct divine action at the level of quantum uncertainty, however it may be expressed, the naturalistic ontology adopted here maintains that there is no direct expression of the divine in the natural world. The rationale for discounting divine action at the quantum level can be taken as twofold, though there may be further problems. Firstly, it is contested here that such a view appeals to a ‘God of the gaps’ mentality and

⁵⁵⁸ John Polkinghorne, ‘The Metaphysics of Divine Action’, Robert John Russell, Nancey Murphy and Arthur Peacocke eds., *Chaos and Complexity*, p. 153

⁵⁵⁹ John Polkinghorne, *Exploring Reality: The Intertwining of Science and Religion*, (New Haven: Yale University Press, 2005) p. 36

⁵⁶⁰ Robert John Russell, ‘Five Key Topics on the Frontier of Theology and Science Today’, *Dialog: A Journal of Theology*, 46.3 (2007) p. 202

⁵⁶¹ Robert John Russell, *Cosmology: From Alpha to Omega*, p. 151

⁵⁶² Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, p. 215

⁵⁶³ Karl W. Giberson and Francis S. Collins, *The Language of Science and Faith: Straight Answers to Genuine Questions*, (Illinois: IVP Books, 2011) p. 119

may only be understood from a particular interpretation of science and quantum theory. Though the nature of the physical world as explained through quantum physics or chaos theory does indeed appear less mechanistic than our image of the macro-world, physicists such as Hawking are cautious in asserting that matters are actually resolved.⁵⁶⁴ In other words, quantum physics still represents ‘gaps’ in a scientific ontology which may be explained in the future, through something like M-theory or another as of yet unknown mathematical formulation. This point is also raised by Drees in his critique of Polkinghorne and others’ promotion of quantum interaction (however, Drees does acknowledge that the quantum ‘gaps’ are quite different from earlier ‘gaps’ in scientific knowledge – the question of humanity’s origin, for instance).⁵⁶⁵ Consequently, it is argued here that it is less coherent to postulate divine interactions at the quantum level then to persist with a naturalistic ontology which precludes any divine interaction with the natural world. The second aspect to my rejection of divine interaction in the apparent indeterminacy in the physical laws pertains to the problem of natural evil to be discussed in the section 4.2.2.

Mental Causation

An alternative model of viewing divine interaction with the world rests on an analogy between mental and physical causation. One particular proponent of this view is Philip Clayton, who acknowledges that in light of modern science, the apparent rigour of the world’s causal nexus seems to exclude God.⁵⁶⁶ Clayton proposes a nuanced and perhaps dialectical view of the mind which is a prerequisite for his model of divine action. He does not propose a complete dualism in which the mind is fundamentally different from matter; he opts for a more emergent approach, similar to that explored in the previous two

⁵⁶⁴ Stephen Hawking and Leonard Mlodinow, *The Grand Design*, p. 181

⁵⁶⁵ Willem B. Drees, ‘Gaps for God?’, Robert John Russell, Nancey Murphy and Arthur Peacocke eds., *Chaos and Complexity*, pp. 228-233

⁵⁶⁶ Philip Clayton, ‘The Value of the Panentheistic Analogy: A Response to Willem Drees’, *Zygon: Journal of Religion and Science*, 35.3 (2000) p. 700

chapters.⁵⁶⁷ A distinctive issue which Clayton contends is that the emergence of the mind or consciousness “suggests a level of reality that breaks the bonds with naturalism.”⁵⁶⁸ This clearly differs from the naturalistic/material view of mind discussed in section 4.1. Interestingly, Clayton is very much aware that his position is dialectical, treading perhaps with difficulty between two opposing positions (materialism and dualism), drawing an idiom from Homer, “Between Scylla and Charybdis we set our sails.”⁵⁶⁹

Clayton articulates his position then, as envisioning human thought as a natural process though one which is not determined by the physical laws, and is thus, open to “higher types of causality.”⁵⁷⁰ If the mind is not purely physical, as in the material view, then perhaps the causality of the mind is more open-ended. Such a higher type of causality would be, as Clayton suggests, divine influence.⁵⁷¹ Having asserted his approach to the mental realm and his understanding that such an approach allows for divine influence on human thought, he proposes a ‘panentheistic analogy’ which he feels best represents how God’s relationship to the world should be construed:

The body is to mind as the body/mind combination – that is human persons – is to the divine. The world is in some sense analogous to the body of God; God is analogous to the mind which indwells the body, though God is also more than the natural world taken as a whole... the power of this analogy lies in the fact that mental causation, as every human agent knows it, is more than physical causation and yet still a part of the natural world.⁵⁷²

Clayton’s proposal regarding divine influence at the level of human thought, however, could be considered significantly problematic. For example, his understanding of ‘higher types’ of causation is deeply ambiguous and as he himself asserts, is beyond the

⁵⁶⁷ Ibid., p. 703

⁵⁶⁸ Ibid., p. 703

⁵⁶⁹ Philip Clayton, *Mind and Emergence: From Quantum to Consciousness*, (Oxford: Oxford University Press, 2004) p. 129

⁵⁷⁰ Ibid., p. 189

⁵⁷¹ Ibid., p. 189

⁵⁷² Philip Clayton, ‘Panentheism in Metaphysical and Scientific Perspective’, Philip Clayton and Arthur Peacocke eds., *In Whom We Live and Move and Have Our Being*, (Cambridge: William B. Eerdmans, 2004) p. 83

remit of unequivocal language.⁵⁷³ Ambiguity was considered not to be a substantial weakness in arguments such as Tillich's notion of depth in the previous chapter. However, there is a difference in Clayton's views here as such ambiguity is potentially explicable by scientific methods given that he is discussing a causal influence in the natural world. As mentioned in the previous section, technologies pertaining to artificial consciousness and brain-computer interfaces would seem to give weight to the notion that the mind is in principle explicable in terms of physics. Thus, the ambiguities in his explication of his view of the mind are more problematic than the notion of depth discussed in the previous chapter.

In addition, if God interacts with minds in the way Clayton proposes, then it may be thought that God's actions are extraordinarily local when considering the vastness of cosmic space (though this might lead to speculation on extraterrestrials and whether God may have interacted with them). Furthermore, though Clayton acknowledges disanalogies, theologians such as Arthur Peacocke have criticised Clayton's model for not drawing clear enough distinctions between God and the world.⁵⁷⁴ The most significant issue taken with Clayton's panentheistic analogy in this context, however, is again the problem of evil to be discussed in the next section. Overall, the coherence of the material/naturalistic ontology inclusive of a material image of human thought seems a more viable option than Clayton's proposal regarding a 'higher level' causal realm.

Whole System Causation

Arthur Peacocke is considered to have played a significant role in the development of what has been referred to as 'top-down causation', 'downward causation', 'whole-part constraint' or the term I have used, 'whole-system causation' – noting that these terms may have

⁵⁷³ Ibid., p. 82

⁵⁷⁴ Arthur Peacocke, *Paths from Science Towards God* p. 58

idiosyncrasies.⁵⁷⁵ Peacocke's proposal of God's interaction with the world is akin to that of Polkinghorne and Clayton insofar as he suggests a model of God's interaction with the world which does not contravene the physical lawfulness of the universe as explicated through physics. However, his model for divine interaction differs from those who appeal to quantum indeterminacy or chaos theory, in that it is not the unpredictabilities in these theories where God acts. His model also differs from Clayton's mind/body analogy, as he feels there needs to be more of an ontological difference between God and creation – though he does acknowledge some heuristic value in a mind/body analogy.⁵⁷⁶ Peacocke articulates his position on divine action as follows:

If God interacts with the “world” at a supervenient level of totality, then God, by affecting the state of the world-as-a-whole, could, on the model of whole-part constraint relationships in complex systems, be envisaged as able to exercise constraints upon events in the myriad sub-levels of existence that constitute that “world” without abrogating the laws and regularities that specifically pertain to them – and this without “intervening” within the unpredictabilities we have noted. *Particular* events might occur in the world and be what they are because God intends them to be so, without at any point any contravention of the laws of physics, biology, psychology, sociology, or whatever is the pertinent science for the level of description in question.⁵⁷⁷

In Peacocke's model, God acts externally on the closed system of the world. Therefore, Peacocke's model may have merit, in that it can be considered more consonant with the natural sciences than quantum interactions (given the potential for as of yet unknown mathematical formulations to close the 'gaps' in unpredictability) or mental causation (given the successes of brain-computer interfaces and artificial intelligence projects cited above as indicative of the coherence of a material ontology). As such, Peacocke's model could be considered consistent with the naturalistic ontology I espouse, in

⁵⁷⁵ See Nancey Murphy, 'Arthur Peacocke's Naturalistic Christian Faith For the Twenty-First Century: A Brief Introduction', *Zygon: Journal of Religion and Science*, 41.1 (2008) p. 69

⁵⁷⁶ Arthur Peacocke, 'God's Interaction with the World', Robert John Russell, Nancey Murphy and Arthur Peacocke eds., *Chaos and Complexity*, p. 285

⁵⁷⁷ *Ibid.*, p. 283

that within the system itself, all events are causal/natural. What distinguishes my own position from Peacocke's, which could be considered naturalistic, is his additional consideration that causal events may be the result of an external force, namely, God's acting on the whole system. In this context, I reject Peacocke's additional consideration of whole-system causation, not because it conflicts with an understanding of an approach to science, but rather for more theological reasons, namely, the problem of evil.

4.2.2 Natural Evil

It was asserted in the previous chapter that an appropriate response to moral evil in light of evolutionary theory and particularly evolutionary ethics was to incorporate aspects of Hick's representation of Irenaeus with regard to ongoing moral development (though as noted, Hick's approach is eschatological and continues after death, whereas what I take from him is just the notion of moral development). This response need not stand in opposition against other responses to moral evil, such as a free-will defence, though the developmental connotations of an ongoing moral development seems to coalesce well with evolutionary theory. However, as I will argue below, Hick's developmental view cannot provide an adequate response to the problem of natural evil. On this point, I contest that a naturalistic ontology is the most appropriate response to natural evil. Theologically, the problem of natural evil provides support for the coherence of a naturalistic ontology over and against any model of divine interaction such as those presented above. Drees also highlights this point as he articulates, "If God acts in the world, and especially if God acts in response to the needs of individuals, why is there so much evil and suffering in the world?"⁵⁷⁸ If God were to interact with the world, through quantum indeterminacy, chaos, mental causation, whole-system causation, or any other way, the problem of evil becomes acute. Therefore, a

⁵⁷⁸ Willem B. Drees, *Religion, Science and Naturalism*, p. 93

case can be made that a naturalistic ontology in which God does not interact with the world is more theologically coherent than any model of divine interaction, as the problem of evil is not raised as acutely.

Of course, there are alternative views, some of which need not be asserted in strict opposition to a naturalistic ontology. For example, contemporary discussions on the problem of evil formulated against the backdrop of evolutionary theory have been put forth by theologians such as Christopher Southgate. Southgate's theodicy is nuanced and multifaceted. One particular aspect he outlines is what he terms in shorthand 'the only way argument'; "I hold to the (unprovable) assumption that an evolving creation was the only way in which God could give rise to the sort of beauty, diversity, sentience, and sophistication of creatures that the biosphere now contains."⁵⁷⁹ His argument is reminiscent of Leibniz and his 'best of all possible worlds' approach, mentioned briefly in section 1.3.⁵⁸⁰ However, Southgate also supplements this view with a particularly Christian approach; he envisages God as a 'co-sufferer', sharing some of the burden of creation's suffering.⁵⁸¹ Interestingly and pertinent to the current discussion, this approach is also how Peacocke responds to the theodicy problem whilst maintaining the idea that God interacts through whole-system causation.⁵⁸² Southgate also leans on the Cross of Christ as "the epitome of... divine compassion, the moment of God's taking ultimate responsibility for the pain of creation, and – with the resurrection – to inaugurate the transformation of creation."⁵⁸³ In this sense, Southgate's view is similar to that of Holmes Rolston's Christian interpretation of evolution as a sacrificial tragedy, also mentioned in section 1.6.2.⁵⁸⁴

⁵⁷⁹ Christopher Southgate, *The Groaning of Creation*, p. 16

⁵⁸⁰ Gottfried Leibniz, *Discourse on Metaphysics*, pp. 262-263

⁵⁸¹ Christopher Southgate, *The Groaning of Creation*, p. 16

⁵⁸² Arthur Peacocke, *Paths from Science Towards God*, p. 142

⁵⁸³ Christopher Southgate, *The Groaning of Creation*, p. 16

⁵⁸⁴ Holmes Rolston III, 'Caring for Nature', pp. 292-293

There are two key reasons however, why particular aspects of Southgate's theodicy are rejected in favour of my understanding of a naturalistic ontology – although Southgate's approach could be understood as naturalistic, my own position is different primarily given his views on teleology, which is the first reason I find his theodicy insufficient (though he also alludes to divine interaction, which also differs from my understanding of a naturalistic ontology). As discussed in the previous chapter, an *a priori* teleology is rejected in my approach. In contrast, Southgate presents his understanding of evolution as teleological by suggesting a number of potential ways in which teleological evolution may be manifest, for example Conway-Morris' theory of convergence (discussed in the previous chapter) and Robert John Russell's perspective that God may act at the quantum level influencing genetic mutations and thus guiding the course of evolution.⁵⁸⁵ Such teleology, as Southgate acknowledges, raises again the theodicy question. In Southgate's perspective, however, merging the notions of the 'only way' argument and divine co-suffering provides an appropriate response to this particular element of theodicy. The pain and suffering of the evolutionary process is "the necessary price of the realisation of values through evolution, and the price is worth it."⁵⁸⁶

Setting aside the scientific arguments against such a teleological interpretation of evolution, a popular objection to such teleology based on theodicy is expressed by Fyodor Dostoevsky in his novel *The Brothers Karamazov*. Dostoevsky's character Ivan, contrary to Southgate's suggestion, suggests that any plan of the world which involves such suffering as apparent in this world is unrewarding, "And if the sufferings of children go to swell the sum of sufferings which was necessary to pay for truth, then I protest that the truth is not worth such a price... too high a price is asked for harmony."⁵⁸⁷ Southgate acknowledges this

⁵⁸⁵ Christopher Southgate, *The Groaning of Creation*, p. 16

⁵⁸⁶ *Ibid.*, p. 12

⁵⁸⁷ Fyodor Dostoevsky, *The Brothers Karamazov*, trans. Constance Garnett, (New York: Lowell, 2009) p. 308 [Originally published 1880]

objection and states that “This is evolutionary theodicy at its sharpest.”⁵⁸⁸ Nevertheless, he feels his response to theodicy is adequate.

It is also Dostoevsky’s theodicy challenge that leads to my suggestion, in the previous chapter and above, that Hick’s Irenaean theodicy is inadequate in respect of natural evil. Hick’s Irenaean understanding of natural evil can be reconciled with his understanding of moral development by the suggestion that the world “ought to be, as an environment for beings who are in the process of becoming perfected.”⁵⁸⁹ In Hick’s understanding, a world devoid of pain and suffering would not allow for a full moral development, “... the presence of pleasure and the absence of pain cannot be the supreme and overriding end for which the world exists. Rather, this world must be a place of soul making.”⁵⁹⁰ For Hick, the presence of natural evil is a means to an end (soul-making) – and significantly, for him, such an end could not be realised without it. Southgate similarly, sees whatever natural evil that occurs as a means, and in his view the only means possible to an end, namely, the “beauty, diversity, sentience, and sophistication of creatures” now existent.

In riposte to Southgate’s position, it is contested here that a teleological approach such as the one Southgate considers is too vulnerable to Dostoevsky’s theodicy challenge, which provides adequate reason for discounting it in favour of a predominantly non-teleological appreciation of evolution such as presented in the previous chapter, and a naturalistic ontology as discussed in this chapter. In some respects, one could persist as Southgate does, in suggesting that the ‘only way argument’ is a sufficient response; my rejection of it is not based on genuine incoherence in his theodicy but rather, comes down to the (somewhat sensitive, perhaps even personal) question of how much suffering can be tolerated in a planned world. Notwithstanding, I also relied on the chance/necessity picture

⁵⁸⁸ Christopher Southgate, *The Groaning of Creation*, p. 14

⁵⁸⁹ John Hick, *Evil and the God of Love*, p. 258

⁵⁹⁰ *Ibid.*, p. 259

of evolution to reject *a priori* teleology in the previous chapter, which may give my approach greater weight though in a different context.

The second reason for my judgement on the inadequacy of Southgate's response to theodicy is that its Christian focus is too narrow in the context of a pluralistic world. This point was also acknowledged by Neil Messer in the previous chapter as it concerned Barth's depiction of the 'knowability' of goodness in light of Christ. Messer holds a view similar to Southgate with regard to responding to theodicy within the framework of Christian salvation – though he specifically indicates how he differs from Southgate in certain respects, such as Southgate's eschatology.⁵⁹¹ However, Messer does appreciate that a Christ-centred theodicy may be difficult to affirm in an interreligious setting. Messer seeks to rectify this problem by affirming the universality for God's saving work through Christ, which may be a promising approach.⁵⁹² Nevertheless, I find it more favourable to persist with a more open and less specific conception of a naturalistic ontology, rather than one as Christ-centred as with Messer or Southgate.

Consequently, the particularly acute manifestation of the problem of evil raised by a teleological understanding of evolution such as Southgate's, and the specifically Christian aspects of his response to the problem, give significant weight to the argument that his theodicy is less favourable than the one presented in this chapter. The naturalistic ontology as understood here presents two distinct points which serve as aspects to a response to theodicy. Firstly, as discussed above, there is no specific divine action in the world, which subverts the question of why God does not act to prevent suffering. Secondly, as elaborated upon in more detail in the previous chapter, there is no broad scheme of teleology existent in the universe until the onset of human thought, which is sufficiently distinct from the divine

⁵⁹¹ For a fuller discussion, see Neil Messer, 'Natural Evil After Darwin', Michael Northcott and R.J. Berry eds., *Theology After Darwin*, pp. 139-154

⁵⁹² Neil Messer, *Selfish Genes and Christian Ethics*, pp. 211-124

realm that responsibility for evil cannot be inferred upon God; without teleology, evil cannot be seen as an element of a divine plan.

Ultimately, it is contended here that from the perspective of a moral framework, it is highly difficult to persist with the understanding that a distinct causal force in the world can be associated with the divine, or that the universe adheres to a distinctive teleology, however pliable that teleology is. The challenges presented to causally active or teleological understandings of God's relationship with the world, by those such as Dostoevsky, are substantial enough to warrant a view more closely aligned with a naturalistic ontology. Others have presented similar criticisms of a God who maintains a direct causal influence in the world, such as the British theologian David Jenkins. Jenkins finds it "morally intolerable" to consider God as an additional and occasional causal force given the immensity of suffering experienced in the world. The twentieth century Jewish philosopher Hans Jonas similarly, in reflecting particularly on Auschwitz, adamantly opposes how an omnipotent and omnibeneficent God could allow such suffering to occur; thus, there is a need to re-evaluate or re-imagine a conception of God which could be reconcilable with such atrocities.⁵⁹³ Interestingly, Jonas' perspective as a philosopher of biology also supports the view presented here; that there is no teleological dimension in the basic process of evolution; it is more favourable to envisage God as having relinquished his power – a theme to be explored in section 4.3.⁵⁹⁴ Therefore, it is contested here that a naturalistic ontology, which precludes both divine action and an initial teleology, can be more theologically coherent than a causally active God or a teleological world, as the problem of evil becomes too acute in the latter cases.

⁵⁹³ Hans Jonas, *Mortality and Morality: A Search for God after Auschwitz*, Lawrence Vogel ed., (Illinois: Northwestern University Press, 1996) p. 133 [Originally published 1984]

⁵⁹⁴ *Ibid.*, p. 190

4.2.3 *The Integrity of Contingency*

A further argument which illustrates the theological coherence of a naturalistic ontology is the issue of the integrity of contingency. It could be argued that it is in fact the inalienability of the physical laws which provide a deeper sense of meaning when we approach the ‘limit questions’ of science, mentioned in section 4.1. If the physical laws were more amenable, then perhaps their significance in terms of being indicative of depth would be mitigated. Miracles are not then seen in various individual instances of divine action; in fact, miracles so construed may undermine an appreciation of the holistic structure of the universe and its laws. Interestingly, it is the structure of the laws of the universe that form the basis of the various incarnations of the anthropic principle or cosmological argument for Gods’ existence, though these are not arguments I wish to advance here.⁵⁹⁵ It is the overall integrity or universality of physical laws that may beg questions of why the universe is the way it is, reiterating Einstein’s assertion that the comprehensibility of the universe is a miracle – though not a miracle as construed as a transgression of the laws of nature. Pannenberg offers a similar reading as he states, “... the order of nature itself by natural law is one of the greatest miracles, in view of the basic contingency of events and of their sequence.”⁵⁹⁶ This is not to advance the ‘first cause’ argument and suggest that God initially created the universe by ‘fine tuning’ the physical laws, but merely to suggest that the orderliness of the universe is indicative of meaning or depth, to again use Tillich’s phrase – a depth that does lie outside of the scope of science at least as currently conceived; it may be impossible for science to explain science itself.

In viewing the contingency of the natural laws in this way (a holistic picture of the physical processes as indicative of meaning) one inevitably faces the question which has been touched on at various points in this chapter and the last; whether the contingency of the

⁵⁹⁵ For a summary, see John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle*, (Oxford: Oxford University Press, 1986)

⁵⁹⁶ Wolfhart Pannenberg, ‘The Concept of Miracle’, p. 761

physical laws implies teleology. McMullin interestingly points out that the contingency of the universe has been used both as an argument in favour of and against teleology. For example, in cosmology, the contingency or chance of the events allowing the big bang to occur and a universe such as this one to form seem strikingly improbable as to imply intention. However, in the case of evolutionary biology, the contingency or chance of the process seems to exclude purpose and imply relative randomness, at least at the level of genetic mutations.⁵⁹⁷ Some have argued that the chances of the universe and life forming are so narrow that this implies a creator, for example, William Lane Craig.⁵⁹⁸ Others however, have taken these immense chance events to be indicative that there is no teleology in nature, for example, Stephen Jay Gould; if the universe were to start again, we would most likely never arise.⁵⁹⁹

Consequently, the contingency of physical events can be interpreted in such opposing ways that they do not necessarily contribute to an argument on teleology. However, it is suggested that the overall structure or contingency of the universe is indicative of depth or meaning. The theological problem of evil discussed above then gives credence to the view that a naturalistic ontology is fully contingent (has no divine interaction) and is non-teleological. To reiterate the main points of this section then, it is argued that the more prominent approach to viewing God's relationship with the world has been to persist in some form of direct divine interaction. Several of the more prominent of these views were considered. Based on inconsistencies in these views, or more significantly, based on the theological problem of evil and the integrity of the contingency of the universe, it was argued that a non-teleological naturalistic ontology with no divine interaction is more theologically palatable than any alternative model of divine interaction. The question then

⁵⁹⁷ Ernan McMullin, 'Cosmic Purpose and the Contingency of Human Evolution', *Zygon: Journal of Religion and Science*, 48.2 (2013) pp. 357-358 [Originally published 1998]

⁵⁹⁸ William Lane Craig, 'In Defence of Rational Theism', J.P. Moreland and Kai Nielsen eds., *Does God Exist? The Debate Between Theists and Atheists*, (New York: Prometheus, 1993) p. 143

⁵⁹⁹ Stephen Jay Gould, *A Wonderful Life*, p. 51

becomes, as McMullin states, how the contingent processes of the natural world can be consonant with the purposes of a Creative agent.⁶⁰⁰

4.3 A Theological Appropriation of a Naturalistic Ontology

Hitherto in this chapter, it has been contested that a naturalistic ontology can be a coherent system based on recent discourse in science and philosophy, with respect to the philosophy of consciousness and modern technological advances in brain-computer interfaces and synthetic life. Moreover, it has been contested that a significant argument can be made for a naturalistic ontology given that it is less vulnerable to the theodicy problem than visions of a teleological world or a world open to direct divine interaction. Such a naturalistic ontology also, as it pertains to the focus of this thesis, easily subsumes the evolutionary account of ethics, given that it requires no necessary reference to a spiritual or divine realm. Such a naturalistic/material ontology is thus, congruent with modern science and the theological problem of evil. However, such a vision of a naturalistic/material world, as noted in section 4.1, will be immediately looked upon unfavourably by many theologians. A naturalistic ontology may cause significant tension with a theological worldview as it may leave God redundant and shape a deism or even atheism. This implication of naturalism is what has spurred theologians such as Griffin to assert its incompatibility with Christianity.⁶⁰¹ In excluding divine action in the physical world, Griffin feels that a naturalistic ontology such as the one advocated here denies cardinal presuppositions of the Christian faith.

Drees notes this point as he explains that a naturalism which excludes divine action may threaten to make our ideas about God superfluous.⁶⁰² As Alasdair MacIntyre states, it is

⁶⁰⁰ Ernan McMullin, 'Cosmic Purpose and the Contingency of Human Evolution', p. 348

⁶⁰¹ David Ray Griffin, *Two Great Truths*, pp. 74-75

⁶⁰² Willem B. Drees, *Religion, Science and Naturalism*, p. 106

as if theists are giving atheists less and less to not believe in.⁶⁰³ Griffin consequently criticises versions of religious naturalism, such as that of Drees, on the basis that they are minimalist with respect to religion.⁶⁰⁴ Whilst Griffin's criticism of Drees is not considered substantive here, given that Drees provides a view of the role of religion in his version of naturalism⁶⁰⁵, Griffin's point does need to be addressed; how can a naturalistic ontology which excludes divine action have a theological dimension? The absence of a theological dimension has also led theologian Charley Hardwick to criticise almost all forms of religious naturalism – 'religious naturalism' being more specific than naturalism, as an absence of theological appropriation poses no difficulty for atheistic naturalism. He states that representative thinkers such as Michael Hogue, Loyal Rue and others, do not develop their religious naturalisms within biblical or theological traditions, and therefore, fail to fully appreciate theological themes such as 'sin' or 'fault'.⁶⁰⁶ Whilst I do not specifically engage with sin or fault here (though they have played a role in the development, or at least the contextualising of my approach, as discussed in Chapter One), I will rely on three other theological themes, kenosis, autonomy, and atemporality, to illustrate how a naturalistic ontology can be theologically appropriated.

Kenosis

The term 'kenosis', taken from the Greek *κένωσις* for 'emptiness', is used in this context to refer to the theological theme of 'divine self-emptying' present in Christian and Jewish thought. The theme of kenosis is particularly prevalent in relation to Christian incarnational theology, in God humbly emptying God's self in becoming human. The theme of humility is

⁶⁰³ Alisdair MacIntyre, 'The debate about God: Victorian Relevance and Contemporary Irrelevance', Alisdair MacIntyre and Paul Ricoeur eds., *The Religious Significance of Atheism* (New York: Columbia University Press, 1969) p. 24

⁶⁰⁴ David Ray Griffin, 'A Richer or Poorer Naturalism?', p. 595

⁶⁰⁵ Willem B. Drees, *Religion, Science and Naturalism*, pp. 24-36

⁶⁰⁶ Charley D. Hardwick, 'Review: The Promise of Religious Naturalism, by Michael S. Hogue', *Zygon: Journal of Religion and Science*, 48.4 (2013) p. 1016

clearly discernable in the Christian narrative; God did not become a great king, warrior or political leader. God was not god-like on earth, and in this sense, the incarnate God of Christian theology was strikingly different from the earthly gods of previous mythologies. The Christian God incarnate was portrayed as a humble carpenter. In his incarnation, God “... emptied himself, taking the form of a slave and being born in human likeness. And being found in human form, he humbled himself” (Philippians 2:7-8). The theme of Jesus’ humility reoccurs at various stages in the New Testament, perhaps most saliently in the washing of the disciples’ feet (John 13.1-20). This deeply symbolic act of humility may be interpreted as mirroring the humility of God becoming human, in a sense the relinquishment of divine power.

This theme is raised here given that it can also be seen as a way of theologically appropriating the relationship between God and creation. The concept of envisioning creation as an act of kenosis has been considered by a number of contemporary scholars, as explored in a volume edited by John Polkinghorne in 2001, *The Work of Love: Creation as Kenosis*. The Christian understanding of kenosis, it is argued here, provides a substantive theological understanding of God’s relationship with creation that is congruent with the naturalistic ontology presented thus far. Interestingly, the theologian Jürgen Moltmann points out that the theme of kenosis differentiates the Christian understanding of God from previous understandings of God which he suggests stems predominantly from Aristotelian metaphysics:

The attributes of deity related to the world (omnipotence, omnipresence, omniscience, immortality, impassibility, and immutability) derive from Aristotle’s general metaphysics. They have little to do with God’s attributes according to the history of God to which the Bible testifies.⁶⁰⁷

⁶⁰⁷ Jürgen Moltmann, ‘God’s Kenosis in the Creation and Consummation of the World’, John Polkinghorne ed., *The Work of Love: Creation as Kenosis*, (Cambridge: William B. Eerdmans, 2001) pp. 139-140

There arises thus a dichotomy between the humility/powerlessness of the God of the Christian narrative portrayed through the humble carpenter, and the omnipotence etc. of the God of classical philosophy. In this sense, the frictions that arise between a naturalistic ontology and a theological view are only based on one tradition of God, namely, the God of Aristotelian attributes. The interpretation of a humble God in the Christian narrative is more amenable to the absence of assertions of omnipotence through miracles or divine action as in the view of a naturalistic ontology.

In addition, the act of kenosis, the voluntary self-limitation of God, can be interpreted as an act of love, and paradoxically, an act of power. God relinquishes power in an act of letting creation be, granting it the gift of freedom and autonomy. Moltmann encapsulates this understanding as follows:

From the creation... God's self-humiliation and self-emptying deepen and unfold. Why? Because the creation proceeds from God's love, and this love respects the particular existence of all things, and the freedom of the human beings who have been created. A love that gives the beloved space, allows them time... freedom is the power of lovers who can withdraw in order to allow the beloved to grow and to come. Consequently, it is not just self-giving that belongs to creative love; it is self-limitation too; not only affection, but respect for the unique nature of the others as well. If we apply this perception to the Creator's relation to those he has created, what follows is a restriction of God's omnipotence, omnipresence and omniscience for the sake of conceding room to live to those he has created.⁶⁰⁸

From this perspective, rather than envisaging a naturalistic ontology as 'excluding' or 'prohibiting' divine action, a naturalistic ontology can be understood as a manifestation of a gift of freedom. For Moltmann, it is this act of self-limitation that is paradoxically, a sign of power.⁶⁰⁹ A theological worldview such as that argued for in this thesis, which promotes a naturalistic ontology in which God does not act, thus finds credence in the theme of kenosis. Such a naturalistic view can be seen as coherent with a theological conception of God, as

⁶⁰⁸ Ibid., p. 147

⁶⁰⁹ Ibid., p. 148

well as, crucially, the contingency and self-sufficiency of the causal web made known through the natural sciences.

Kenosis can therefore be understood as an element of a theological appropriation of a naturalistic ontology which does not provision for any direct divine interaction in the world. In this way, the theme of kenosis also makes a contribution to addressing the problem of evil; God does not act to prevent suffering as God does not act in the world. Polkinghorne also acknowledges this important facet of the kenotic view:

Such an understanding is also basic to theodicy's disclaimer that God does not will the act of a murderer or the destructive force of an earthquake, but allows both to happen in a world in which divine power is deliberately self-limited to allow causal space for creatures. This qualification of omnipotence is the most widely recognised and accepted aspect of divine kenosis.⁶¹⁰

However, Polkinghorne still persists with his understanding of Gods' ability to act directly in the physical world, even if in his understanding God's action is not an intervention *per se*, as it does not involve a contradiction of the physical laws.⁶¹¹ Similarly, other scholars who subscribe to various modes of divine action discussed above see serious merit in the kenotic view, for example, Barbour, Peacocke, Ward, Ellis, and others.⁶¹²

This is where my own position diverges. The integrity and absoluteness of the causal nexus is cardinal for the naturalistic ontology espoused here; no form of direct divine action is seen. If divine action were allowed, even on a subtle scale, the problem of evil would be insurmountable. Even a loosely teleological view of the world is highly vulnerable to Dostoevsky's articulation of the problem of evil. Consequently, the naturalistic ontology adopted here is non-teleological, up to the point of human consciousness. This naturalistic ontology however, can be understood theologically in terms of kenosis – a loving act of

⁶¹⁰ John Polkinghorne, 'Kenotic Creation and Divine Action', John Polkinghorne ed., *The Work of Love*, p. 102

⁶¹¹ Ibid., p. 100

⁶¹² See their respective essays in John Polkinghorne ed., *The Work of Love*

relinquishing the power to intervene or sculpt the world's future. In this sense, I take the theme of kenosis further and to its logical conclusion; a total relinquishing of power. A partial self-limitation with the provision to continue to causally influence the world and allow suffering does not suffice. The Christian narrative presents God as fully relinquishing power, eventually making the ultimate sacrifice in Jesus' crucifixion. The sense of ultimacy portrayed in the crucifixion could be interpreted as giving credence to the notion that the kenotic creation is also ultimate – a complete self-emptying, which would cohere with a Christian understanding of God and with the naturalistic ontology advocated here.

Autonomy

A related theme which can be seen as supporting a theological appropriation of a naturalistic ontology is the theological necessity of creation's autonomy. Similar to the theme of kenosis, several scholars engaged in the religion-science dialogue have acknowledged the importance of contingency, chance, and how integral these issues are to the scientific worldview and indeed the theological problem of evil. Barbour for example, notes that the concept of divine self-limitation is more coherent with the biblical depiction of God and with current scientific evidence regarding contingency.⁶¹³ However, Barbour is still reluctant to accept a worldview that is fully contingent, i.e. not teleological. He discusses an overall plan for the world, though one which is not completely predetermined:

We can see design in the whole process by which life came into being, with whatever combination of probabilistic and deterministic features the process had. Natural laws and chance may equally be instruments of God's intentions. There can be purpose without an exact predetermined plan.⁶¹⁴

⁶¹³ Ian G. Barbour, *When Science Meets Religion: Enemies, Strangers or Partners?*, (San Francisco: Harper Collins, 2000) pp. 169-170

⁶¹⁴ *Ibid.*, p. 63

Contrary to Barbour, I suggest that only the image of a fully autonomous creation can provide an aspect of a response to the problem of evil; a naturalistic ontology in which God has no direct involvement explains evil by referral to natural processes, which God does not directly engage with. Barbour makes a similar appeal to kenotic thought, as he writes that, “Voluntary self-limitation exonerates God from direct responsibility for specific instances of evil and suffering...”⁶¹⁵ Barbour goes on to promote an overall purpose in the world, which he himself acknowledges makes God ultimately responsible for suffering. This it is argued, is a key weakness in Barbour’s thought, and indeed the thought of others who view an overall plan in nature or divine action. An autonomous and non-teleological creation seems more theologically palatable and indeed more congruent with scientific depictions of the world’s causal web.

Whilst Barbour, Polkinghorne, Peacocke and others support a degree of divine self-limitation, they are unwilling to allow a fully autonomous creation, which my understanding of a naturalistic ontology requires. Barbour for instance, acknowledges the functionality of naturalism, but when understood as a metaphysic he feels it rejects many traditional religious beliefs and is minimalist with respect to religion. As such, he classifies forms of scientific naturalism such as that espoused here as being in conflict with religion.⁶¹⁶ However, contrary to Barbour’s assertion, it is contested here that a naturalistic ontology does not conflict with a religious view; a naturalistic ontology is demonstrably coherent with a theological conception based on the themes of kenosis, autonomy, and atemporality which will be discussed in the next section; scientific naturalism is thus compatible with a theological understanding of the world. It may be the case that science could have fully laid waste to any notion of religious belief, in some as of yet inconceivable way (perhaps by providing a definitive explanation for the existence of the universe and its orderliness), but it

⁶¹⁵ Ian G. Barbour, ‘God’s Power: A Process View’, John Polkinghorne ed., *The Work of Love*, pp. 6-7

⁶¹⁶ Ian G. Barbour, *When Science Meets Religion*, pp. 157-159

has not. Moreover, if this were to occur, then intellectual honesty would require such a view to be accepted, presuming it passed all of the usual scientific and philosophical rigour. It would be meaningless to persist with belief in a God in spite of evidence to the contrary. However, the picture that is presented from the naturalistic ontology leaves us with a sense of depth, on questions such as why the universe exists and why it is comprehensible.

Furthermore, the image of an autonomous creation can be argued for from a theological perspective even without recourse to science or the problem of evil. For example, it can be argued that creation needs to be autonomous in order for it to be considered having a relationship with God as opposed to merely being an extension of God, or a manifestation of God's wishes. A world which is autonomous allows for freedom and thus is opposed to a God who maintains ascendancy of creation, becoming a tyrant or a puppet-master (to use the phrases of Polkinghorne and Haught respectively).⁶¹⁷ Freedom or autonomy is an important facet of theology; without it, the significance of moral actions becomes questionable. Similarly, when applied to creation, the significance of any action, morality, religious thought, devotion, etc. is diminished if they were predetermined. It may not be that the world would be completely pointless if the outcome was foreseen, though it could be argued that the significance is diminished, akin to watching a sports event the outcome of which is already known. If the world was not fully autonomous, evil acts too, the holocaust and the suffering of children, would merely be elements of a plan being unfolded – the crux of Dostoevsky's theodicy challenge. A free and autonomous creation is then more coherent with the theological concept of a good God, as well as with the various other themes explored above (scientific knowledge of the natural world and kenosis).

⁶¹⁷ John Polkinghorne, *Reason and Reality: The Relationship Between Science and Theology*, (London: SPCK, 1991) p. 83; see also, John Haught, 'Darwin and the Cardinal', *Commonweal*, 132.14 (2005) p. 39

Atemporality

Another element of theologically appropriating a naturalistic ontology is the acknowledgement of the theme of atemporality. Time itself is a distinct caveat of any ontology, theological or otherwise. As Stephen Hawking explains, since the early twentieth century and the theories of scientists such as Einstein and Henri Poincaré, time has been understood as intricately bound with space; Einstein's theory of relativity denies the existence of an absolute time as we experience it.⁶¹⁸ This may have implications for our thinking with regard to 'future' events, whether we consider anything to be teleological, predetermined, or open ended and contingent. If 'future' is not necessarily as we envisage it, given that time is not as we experience it, then this may make unintelligible any talk of teleology or non-teleology. Yet it could also be argued that our worldly experience, and thus values and religious beliefs are to at least a significant degree dependent upon our experience of time. Therefore, we must approach the concept of timelessness with caution. Drees makes this point as he expresses concern over diverting attention from concrete contexts of injustice and suffering to a timeless and eternal 'other place'.⁶¹⁹ Therefore, a theological balance needs to be struck between an acknowledgement of the nature of time as presented in physics, and the importance of time in our experience.⁶²⁰

The image of God acting in the immediacy of the physical world seems to rely too much on the notion that our experience of time is universal, a notion which modern physics has to some extent, laid waste to. Therefore, considerations of divine action in our world may be implying too local a conception of God. A wider image of God as creator must acknowledge the far more pliable vision of time on the larger scale. Moreover, the God of classical theology/philosophy corresponds to such an atemporal God – a God which is not

⁶¹⁸ For a summary, see Stephen Hawking, *A Brief History of Time: From the Big Bang to Black Holes*, (London: Bantam, 1992) pp. 15-34 [Originally published 1988]

⁶¹⁹ Willem B. Drees, *Beyond the Big Bang*, p. 148

⁶²⁰ *Ibid.*, p. 146

limited by our experience of time. It is clear in the writings of Augustine, for example, that he believed God to transcend time, given that God created time, “thou art the Creator of all times... thou madest the whole temporal procession.”⁶²¹ Aquinas too, acknowledged God’s timelessness, though for him, this gave God a vantage point from which God could foresee events which we experience as the future.⁶²² Polkinghorne suggests slightly differently that in the thought of many classical theologians, God cannot have foreknowledge of the future as all events are equally contemporaneous to the atemporal gaze of divinity.⁶²³

The physical picture of the universe which sees time and space as intricately bound together as different dimensions of the universe presents interesting problems for theological ideas, a full analysis of which is beyond the scope of this work. The naturalistic ontology advocated here is coherent with the notion of a God that is outside of time and space, though as stated earlier, it is also necessary for the world’s freedom as a response to theodicy that the unfolding future as we experience it is not predetermined or foreseeable. As Drees suggests, there must be a temporal aspect to God in order for our experience of aesthetics for example, to be meaningful, “... God has God’s time.”⁶²⁴ Polkinghorne also considers a similar divine dipolarity of eternity/time; he agrees with the position asserted here, that the temporal aspect of the world does indeed preclude God’s knowledge of the unformed future, even though God may be considered timeless.⁶²⁵ Given that time appears to be a part of creation, in both the Augustinian theological tradition and indeed in terms of modern physics, it is assumed here that God is indeed atemporal. This understanding coheres well with the prospect of a naturalistic ontology – an autonomous and free world. Divine

⁶²¹ Augustine, *Confessions*, Albert C. Outler trans. and ed., (Philadelphia: Westminster, 1955) p. 182

⁶²² Ernan McMullin, ‘Cosmic Purpose and the Contingency of Human Evolution’, pp. 355-356

⁶²³ John Polkinghorne, ‘The Nature of Time’, Shahn Majid ed., *On Space and Time*, (Cambridge: Cambridge University Press, 2009) p. 282

⁶²⁴ Willem B. Drees, *Beyond the Big Bang*, p. 150

⁶²⁵ John Polkinghorne, ‘The Nature of Time’, p. 283

atemporality then, can be considered as another facet of theologically appropriating a naturalistic ontology, as it places God outside of time and space.

4.4 Conclusion

A theological appropriation of a naturalistic ontology may seem at first glance an oxymoron – indeed it is for several scholars discussed above. However, a case has been made in this chapter for precisely such a view. In section 4.1, a naturalistic ontology was outlined as understood in this context. This ontology, it was argued, stems from Greek philosophies of causality and atomism, and has been substantiated over the centuries through various scientific paradigms. The key features of this naturalistic ontology are that the world is comprised solely of material substance; sub-atomic particles form atoms, which form chemicals, which form amino acids, proteins, RNA and DNA, and ultimately there is an unbroken causal chain that accounts for all existence including human consciousness and morality. The laws of this causal process, the laws of nature, are absolute and unbroken, a statement which carries theological relevance given that it does not envisage any direct involvement in the world from the divine. It was also indicated that such an ontology has discernable caveats and criticisms, which were also acknowledged in this section. Therefore, the adoption of a naturalistic ontology was not naïve, but carefully and tentatively considered. Ultimately, it was argued that such caveats and criticisms do not amount to a substantial argument against a naturalistic ontology. Moreover, developments in modern science were also highlighted which add credence to a naturalistic ontology. Whilst scientific advancements in brain-computer interfacing, artificial intelligence and synthetic life do not definitively validate a naturalistic or material ontology, they would be consistent.

The theological coherence of a naturalistic ontology was then considered in section 4.2. Whilst it was shown that the more prominent approach towards the natural world from

theology has been to consider various forms of divine action, it was argued in this section that none of these positions can overcome the theological problem of evil. The problem of natural evil offers substantial theological reason to adopt a naturalistic ontology, as does the argument from the integrity of contingency. The final section of this chapter, section 4.3, then sought to theologically appropriate a naturalistic ontology by demonstrating that it is consistent with the important theological themes of kenosis, the autonomy of creation and atemporality.

Despite these arguments in favour of a naturalistic ontology, it is acknowledged that envisioning the world as an unalienable causal system may seem nihilistic. Including conscious thought and hence, morality as elements of physical causation in the evolutionary process, may lead some to discount any element of ultimate hope. There may be a sentiment of forsakenness and despair, as Bertrand Russell wrote of evolution, “So far as our present knowledge shows, no ultimately optimistic philosophy can be validly inferred.”⁶²⁶ Here, we reach the cardinal argument of this thesis; that evolutionary ethics offers us a ‘get-out clause’ from this nihilistic outlook, and provides a glimmer of hope. This argument will be presented in the next chapter.

⁶²⁶ Bertrand Russell, *Religion and Science*, p. 26

CHAPTER FIVE:

A HOPEFUL THEOLOGY IN THE CONTEXT OF EVOLUTIONARY ETHICS

5.0 Introduction

This chapter will set forth the culmination and cardinal argument of this thesis; that an evolutionary understanding of ethics can provide hope in what may otherwise be understood as a nihilistic world – understanding hope as in opposition to nihilism. The previous chapters outlined a worldview which drew from evolutionary science and appropriated such science theologically. However, in doing so, this theological approach may be left vulnerable to the criticism of nihilism or forsakenness. In this chapter, I hope to address this potential criticism by offering an alternative interpretation; the fact goodness evolved from a material and non-teleological world can offer a glimmer of hope. Moreover, it is because goodness was not inevitable that gives morality greater significance than had it been inevitable. This glimmer of hope is furthermore, interpreted in the context of a theological metaethic; an overarching theological framework for understanding good and evil which has emerged from developments in modern science and particularly the field of evolutionary ethics, though one which also acknowledges a particular reading of Christian ethics.

A further element of this argument is to suggest that my understanding of Christian ethics offers a *telos* or goal for moral progress – the concept of *agape*. I argue that humanity is in the process of moral progress and that *in general*, this can be evidenced by various moral revolutions and the fact that moral atrocities are less frequent and incite more moral outrage than in previous centuries. In more forthright terms, this is to state that humankind is becoming ‘more moral’. Whilst this element of the argument is threading together two levels of discourse, (a Christian ethical system and an evolutionary meta-ethical framework) it is

not necessarily drawing support from one to the other, but rather stating how the two can be envisaged in one overarching scheme. The realisation of this goal – the culmination of moral progression – may be termed in Christian/theological parlance, the ‘Kingdom of God’, though this is not to take a stance on whether or not such a goal will actually be realised. Furthermore, what this may actually be or be like will not be discussed in this chapter, as this would require more extensive study than space permits. As such, particular ethical issues will not be addressed in any great detail; less controversial moral questions, for example war and race/gender equality, will be peripherally considered to make evident humanity’s moral consensus on certain issues, though this is not to take a stance on other moral questions such as abortion or euthanasia, or whether animals be considered morally relevant. Rather, I will merely put forth a metaethic that suggests a developmental vision of morality from its origins in altruistic behaviour as discussed by sociobiology, through to its current manifestations, which, since the advent of humanity, can be deemed to be developing. This metaethic, I argue, can be understood from a Christian theological perspective if the Christian notion of *agape* is presented as the *telos* of such moral development.

In order to demonstrate how a glimmer of hope can be seen in the evolution of goodness, the potential material fatalism that may be implied by a naturalistic ontology must be addressed. The material depiction of the world such as that espoused in the previous chapter may seem to be inimical to the notion of free will necessary for actions to have moral worth. In section 5.1, it will be suggested that incorporating a naturalistic version of free will can overcome this material inevitability. The naturalistic version of freedom suggested is akin to what has been termed ‘compatibilism’ in other contexts – that physical determinism and free will are compatible.⁶²⁷ The particular representation of compatibilism

⁶²⁷ See Daniel C. Dennett, *Freedom Evolves*, p. 98

adopted here rests on the degree of alternative decisions that are possible in any given mental system. Having established how free will and a material ontology can be reconciled, section 5.2 will then argue for a hopeful interpretation of this picture of evolution; the evolution of freedom and moral values from the material offers an argument against nihilism. Section 5.3 will then interpret this point theologically, by reasserting that such values as evident in humanity are indicative of depth and reflective of the divine.

Viewing values as evolving from the valueless is the first of two discernable examples of hope in the theological framework outlined in this thesis. The second is the suggestion that morality is progressing. This will be argued in section 5.4, where the analogy of an expanding circle of moral relevance will be used to illustrate how humanity's collective moral conscience is in general, developing. Section 5.5 will then suggest that in terms of constructing a Christian metaethic which is incorporative of an evolutionary view of ethics, the Christian love commandment could be seen as the goal of the aforementioned moral progress. The Christian vision of indiscriminate *agape* could be taken as the epitome of an expanding moral circle. Consequently, a Christian ethical framework can emerge enriched by appreciating evolutionary understandings of ethics and scientific understandings of reality.

5.1 Overcoming Material Fatalism: The Question of Free Will

If, as argued in the previous chapter, a naturalistic/material ontology is adopted, then this may imply fatalism. I use the term fatalism here, similar to Chapter Two, to suggest a nihilistic view of the world; that all events are inevitable and that we do not maintain control over our actions; our free will is illusory and our actions are governed by forces beyond our control.⁶²⁸ In Chapter Two, it was considered whether or not our behaviour is fully governed

⁶²⁸ Refer to discussion on moral freedom in section 2.3 for a more detailed explication of my use of the term 'fatalism'.

by our genetic predispositions (genetic fatalism) – it was argued that our consciousness plays significant enough a role in order for this not to be the case. Presently, however, an alternative mode of fatalism will be considered; material fatalism.

If a material ontology encompasses the human mind, then a provisional reading may seem to suggest that all events are inevitable, including human choices. This argument can be advanced by positing two premises; i) that the human mind is comprised of physical matter and nothing more as in a material ontology, and ii) that physical matter obeys the inalienable laws of physics. If these two premises hold, then one reaches the conclusion that human choices are as governed by the physical laws of causality as any other physical event such as snowfall or planetary orbits. Bertrand Russell outlined this implication of a material ontology as he wrote that if everything we understand as matter (which in this case, includes human thought) is subject to stringent physical laws, then “all its manifestations in human and animal behaviour will be such as an ideally skilful physicist could calculate from purely physical data.”⁶²⁹ On this reading, Russell suggests, a human would be equivalent to an automaton, as even their thoughts can be inferred from physics.⁶³⁰

In Chapter Two, it was suggested that a genetic fatalist interpretation fails as a model for understanding human behaviour, including morality, given that it is not sufficiently appreciative of the role of consciousness. However, if consciousness is indeed material, as contended here, then this may merely be a relocation of the locus of fatalism to lower-level entities, i.e., our actions are not fatalistically determined by genes, but by the physical collocations of atoms in our brains. Again on a provisional reading, this prospect would seem to cohere with the reductionism of a naturalistic ontology. If this is the case, then we may be led to a genuinely nihilistic, fatalistic conclusion; that the universe is merely unfolding atomic interactions running their course and even our thoughts and choices are

⁶²⁹ Bertrand Russell, ‘Materialism Past and Present’, p. 213

⁶³⁰ *Ibid.*, p. 214

essentially determined by the laws of physics. This perspective carries significant theological and ethical implications; if our decisions are merely the manifestation of interactions of atoms bound by physical laws, then can we be held responsible for our actions? This is a central issue raised by Nancey Murphy and Warren S. Brown, as they ask:

If humans are *physical* systems, and if it is their brains (not minds) that allow them to think, how can it *not* be the case that all of their thoughts and behaviour are simply the product of the laws of neurobiology? How can it *not* be the case, as the epiphenomenalists argue, that the mental life of reasoning, evaluating, deciding is a mere accompaniment of the brain processes that are really doing all the work?⁶³¹

Murphy and Brown proceed to ask the subsequent question, “If these questions cannot be answered, what happens to our traditional notions of moral responsibility, even of our sense of ourselves as *rational* animals?”⁶³² If the mind is material, and the material is governed by fixed unalienable laws, then what of our moral freedom? Would this material picture of the world seriously mitigate, if not completely eradicate our understanding of freedom, and hence, moral responsibility? A similar question is also posed by Philip Clayton, “It is also questionable whether one can make sense of ethical obligation or moral striving given a purely naturalistic ontology... If all that exists are the objective states of affairs described by the sciences, then all sense of obligation is ultimately an illusion.”⁶³³ If moral obligations were indeed illusory, then despite whatever meaning we perceive or attribute to our own lives, we would be left ultimately with an ontological nihilism – a world in which actions most poignant and profound are merely the results of different manifestations of collocations of atoms in individuals’ brains.

⁶³¹ Nancey Murphy and Warren S. Brown, *Did My Neurons Make Me Do It? Philosophical and Neurobiological Perspectives on Moral Responsibility and Free Will*, (Oxford: Oxford University Press, 2007) p. 3

⁶³² *Ibid.*, p. 3

⁶³³ Philip Clayton, *Mind and Emergence*, p. 173

I argue in this chapter that this nihilistic conclusion does not follow from a material worldview – evolutionary ethics provides a glimmer of hope. However, before that can be argued, the issue of freedom must be addressed (this has been peripherally mentioned throughout this thesis, though will now need a more detailed analysis). In order for actions to have moral worth, they must be considered free – this was signalled as a key feature of my understanding of Christian ethics in Chapter Two, also evident in the thought of Augustine. The question arises then, of how free will can be reconciled, if at all, with the causal nexus of the material ontology espoused in the previous chapter. Although it will be outlined in section 5.1.2 how I suggest this issue be approached, another potential solution which is worthy of consideration has been discussed in contemporary theology, though it will ultimately be rejected here; an appeal to caveats of a naturalistic ontology.

5.1.1 Free Will Contra a Material Mind

Criticisms of a material view of the mind with respect to considering free will have appeared in contemporary theology, such as the alternative to the material model of free will espoused by Nancey Murphy. She has addressed this issue in two important works as a co-author, though henceforth, I speak of her view in the singular, being mindful that it has been explicated with others. Her argument is nuanced, relying on at least three features; nonreduction, quantum indeterminacy, and environmental causation. She does not pose that an immaterial mental realm exists, akin to a Cartesian dualism, but rather, suggests that “there must exist an adequate physical basis for free actions in the hierarchical structuring of the human brain.”⁶³⁴ Whilst she sees merit in an ultimately reductive account of the human mind, such as the one I adopt, she argues that the explanation of the mind in terms of neurophysiology can only be partial; mental properties have a greater complexity than other

⁶³⁴ Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, p. 32

physical properties and are intricately related to environmental variables. Therefore, they cannot be considered identical to brain states.⁶³⁵ This view, she explains, can be termed ‘nonreductive physicalism’.⁶³⁶

Nonreduction

Objections to nonreduction, such as those explicated in the previous chapter (section 4.1) could be recalled at this point. This objection to Murphy’s view pertains to a difference of opinion on what constitutes ‘non-reductionism’. I suggested following from others (see section 4.1) that certain entities cannot be directly explained by their material constituents. Therefore, I agree with Murphy on the issue that mental properties cannot be *directly* explained by reduction to their physical constituents, though I differ in that I contend that mental properties are *ultimately* reducible. For Murphy, our experience of an ‘I’ stems from the existence of a higher-order complex state, which offers us the opportunity to choose between various lines of reasoning with no overriding reason to choose one rather than the other – our mental experience is of a “global, transcendent state.”⁶³⁷ As she explains, on her reading a reductionist view of the mind is not refuted or replaced, but rather supplemented by additional considerations.⁶³⁸ In contrast to this position, I have argued that no such additional considerations are necessary (given that, as noted in section 2.3, reduction is not diametrically opposed to emergence). Reduction does not diminish the significance of the mind, and there is not nor should there be any reason to postulate anything ‘more’ than ultimately reductive elements. The ‘additional considerations’ posited add nothing to the view that cannot be understood through material reduction.

⁶³⁵ Ibid., p. 35

⁶³⁶ Ibid., p. 33

⁶³⁷ Ibid., p. 35

⁶³⁸ Nancey Murphy and Warren S. Brown, *Did My Neurons Make Me Do It? Philosophical and Neurobiological Perspectives on Moral Responsibility and Free Will*, p. 55

Mental Indeterminacy

In addition to her view on the irreducibility of the mind, Murphy also incorporates quantum indeterminacy, which she feels may be a necessary condition for true freedom and spontaneity.⁶³⁹ Her understanding of an irreducible mental process acts downward on a genuinely ontologically indeterminate level (the quantum level).⁶⁴⁰ Our thoughts are not governed by their constituent elements on this view, but rather the ‘whole’ of the mind can choose between ontologically indeterminate options. It is also worth noting that elsewhere, her co-author George Ellis postulated that quantum uncertainty in brain activity may provide a point of divine interaction; God could act in causing different outcomes within quantum events in the brain which would be macroscopically amplified and subsequently influence our decisions.⁶⁴¹ In opposition to such a view, I find sufficient reason to discount Murphy’s appeal to quantum physics to provide a facet of ontologically genuine indeterminacy given the similar discussion on divine action at indeterminate levels in section 4.2.1. Such a view, I argued is an appeal to a ‘God of the gaps’ mentality – an appeal to as of yet incomplete knowledge. In any case, I also contest that ontological indeterminacy is not necessary in providing a sufficient account of free will, or at least, it is worth conceptually exploring an alternative.

Environmental Causality

One further aspect of Murphy’s criticism of reductionist views of the mind is her understanding of environmental causality. Murphy interprets reductionism to always assume bottom-up causation; that entities’ behaviour is ultimately governed by ‘lower-level’ physics

⁶³⁹ Nancey Murphy and George Ellis, *On The Moral Nature of the Universe*, p. 35.

⁶⁴⁰ Nancey Murphy and Warren S. Brown, *Did My Neurons Make Me Do It?*, p. 49

⁶⁴¹ George Ellis, ‘The Theology of the Anthropic Principle’, Robert John Russell, Nancey Murphy and Christopher J. Isham eds., *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*, (Vatican City: Vatican Observatory, 1993) p. 396; for criticism, see Willem B. Drees, *Religion, Science and Naturalism*, pp. 179-180

thus, all causation occurs from the bottom-up. However, even with this interpretation of reductionism, it can be argued that higher-level properties are not illusory nor can they be immediately reduced to their fundamental constituents – see section 4.1. Murphy rightly notes that the environment, social or otherwise, can have a causal effect on the mental system. Therefore, she concludes that mind/brain states cannot be fully governed by their constituents, because they can be causally influenced by external environmental contexts, not just the physical laws that govern their constituents:

It is obvious, is it not, that the environment (or the broader system of which the entity or system in question is a part) often has a causal effect on that entity or system? Is it not, therefore, also obvious that the behaviour of an entity is often *not* determined solely by the behaviour (or laws governing the behaviour) of its parts? And is it not obvious that a sophisticated entity such as an organism has control of (some of) its own parts—the horse runs across the pasture, and all of its parts go with it? If all of this is so obvious, why is causal reductionism still so widely assumed?⁶⁴²

This is where I find Murphy's critique of causal reduction too strong. Whilst Murphy is, strictly speaking, grammatically correct in stating that external causal influences can causally affect the mental system, her point is problematic, as such causal influences are not precluded by reduction. Such causal influences are the result of interacting systems, each of which are governed by their own constituents. The core of reductionism does not preclude reductive causal systems (namely, the environment) interacting, but merely acknowledges that ultimately, each of these systems' behaviour is reducible. Consider for example, two billiard balls. The behaviour of each of the billiard balls on a reductionist view is governed physically by their constituent atoms. If the two balls were to collide, they would cause a change in the state of each other, therefore, each of the balls' behaviour will be influenced by an external or environmental force, namely the other ball. However, both would still be

⁶⁴² Nancey Murphy and Warren S. Brown, *Did My Neurons Make Me Do It*, pp. 54-55

governed by their physical constituents. The same too, for a mind and its environment; suggesting that the mind is governed by the physical laws of its constituent physical properties is not to deny that it can be influenced by an external cause; our thoughts/brain states have external causal influences. For example, we feel certain emotions when listening to certain types of music, or we feel cold if the temperature falls. Such external/environmental influences are easily understood as ‘inputs’ in a material model of the mind such as Dennett’s multiple drafts model discussed in section 4.1.

Consequently, I find sufficient reason to move away from Murphy and others who critique a causally reductive view of the mind, either by viewing it as irreducible, or by postulating quantum indeterminacy as the factor which offers us ‘genuine’ freedom. The task is then to either explain how an ontologically material view of the human mind can account for the freedom necessary for actions to have moral worth, or else succumb to the nihilistic view that we are not truly accountable for any actions. I choose the former, and to do so, I turn to Dennett’s depiction of free will.

5.1.2 Free Will in a Naturalistic Ontology

As discussed in section 4.1, I subscribed to Dennett’s understanding of the mind as a product of physical processes. The mind is not exempt from the long chain of causal interactions in a naturalistic ontology. Free will, as an aspect of the mind is also no exception on this view; as Dennett observes, free will is not “a God-like power to exempt oneself from the causal fabric of the physical world.”⁶⁴³ Notwithstanding, despite the fact that the mind is bound by the “causal fabric of the physical world”, Dennett challenges the direct linkage between physical determinism and inevitability which he feels underpins the polarisation of the

⁶⁴³ Daniel C. Dennett, *Freedom Evolves*, p. 13

debate between hard-determinism (the view that free will is illusory) and agent causation (there is a nonmaterial free will).⁶⁴⁴

It is contested here that evitability – meaning avoidability – emerges not from a genuinely ontological indeterminism but rather from the complexities of deterministic causal systems. To proffer an analogy; the throw of a die is considered random, and is thus often used to introduce ‘chance’ into various games. However, in principle, the throw of a die is entirely non-random – it is governed and fully determined by the laws of physics. If a skilled physicist had complete access to all the relevant information about a die-throw, i.e. the weight of the die, the velocity, the wind-drag, the angle from which it is released, and so on, then that physicist would be able to calculate using Newton’s laws of motion, where the die would land. In practice, such variables would be so numerous and complex that it would be impossible to actually calculate where the die would come to rest; consequently, for all intents and purposes, the throw of the die is random. It may be strictly speaking determinable by a hypothetical intelligence with a God’s-eye perspective, such as that postulated by the eighteenth/nineteenth century philosopher Pierre Simon Laplace.⁶⁴⁵ However, from the perspective of our experience, the causal system of a die-throw is so complex that we cannot calculate it. The human mind can be considered as an analogous causal system, though one exponentially more complex than that of a die-throw – indeed, the human mind it seems is the most complex causal system in the known universe. Whilst our minds are governed by cause and effect, this causal system is so complex that it is far beyond our comprehension. The ontologically indeterminate view of free will thus faces significant challenges, which leads me to the consideration of a more pragmatic understanding of indeterminacy.

⁶⁴⁴ Ibid., pp. 100-101

⁶⁴⁵ Pierre Simon Laplace, *A Philosophical Essay on Probabilities*, trans. Fredrick Wilson Truscott and Fredrick Lincon Emory, (New York: John Wiley and Sons, 1902) p. 4 [Originally published 1812]

In the example of a die-throw, the result is deterministic but as we have lost sight of the laws and variables, given that they are too complex to follow, we envisage the throw as random. Laplace offered a similar understanding with respect to the mind and free choices. Laplace suggests that we have lost sight of the reasons for choices, and therefore we believe that our choices are not determined.⁶⁴⁶ Dennett elaborates on this principle by postulating the interdependence of every causal system in the universe leading to the conclusion that whilst the universe is governed by physical laws, the degree of alternative possibilities are so incomprehensibly vast that events cannot be considered inevitable – he quotes Whitehead in this regard, “The vast causal independence of contemporary occasions is the preservative of the elbow-room within the Universe.”⁶⁴⁷ Therefore, the universe is governed by causal deterministic laws, but such laws offer enough ‘elbow-room’ for events to be considered evitable and thus, free.

Pertaining more specifically to conscious thought, if freedom is considered to be equated to the level of complexity in a causal system, rather than an ontologically distinct factor, then Dennett considers that even ‘lower’ organisms have a degree of freedom.⁶⁴⁸ A redwood tree, for example, can ‘decide’ to blossom in spring, though of course, this is not yet a ‘conscious’ decision. This decision is based on a simple environmental ‘switch’, “A system has a degree of freedom when there is an ensemble of possibilities of one kind or another, and which of these possibilities is actual at any time depends on whatever function or switch controls this degree of freedom.”⁶⁴⁹ Dennett expands on this concept by suggesting that over evolutionary time, such ‘switches’ become more prevalent in systems, and can become linked in parallel or in series, eventually forming larger switching networks, rather

⁶⁴⁶ Ibid., p. 4

⁶⁴⁷ Alfred North Whitehead quoted by Daniel C. Dennett, *Freedom Evolves*, p. 83

⁶⁴⁸ This is view not wholly dissimilar to Whitehead’s understanding that all matter has a degree of experience, though Whitehead’s view is more metaphysical – Whitehead rejects materialism outright, whereas Dennett seeks to reconcile materialism with consciousness. Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*, David Ray Griffin and Donald Sherburne eds., (New York: Free Press, 1978) pp. 78-79 [Originally published 1929]

⁶⁴⁹ Daniel C. Dennett, *Freedom Evolves*, p. 162

than a ‘simple’ on/off switch in systems such as a tree – though perhaps a dendrologist (an individual involved in the study of trees) may argue that the process of tree blooming is in fact quite complex itself. Given the powers of exponential multiplication, the introduction of further ‘switches’ into a system allow the degrees of freedom to “multiply dizzyingly, and the issues of control grow complex and non-linear.”⁶⁵⁰

This is the crux of Dennett’s understanding of free will which I argue fits neatly into the naturalistic ontology promoted in the previous chapter. The human brain is the manifestation of such a system of ‘switches’; it modulates the enormity of information that we perceive through the senses and accesses our past experiences in order to make choices. The incomprehensibly vast amounts of information we acquire and innumerable amount of choices we can make at any given time gives us free will in the same sense that a die throw is random; our free choices are governed ultimately by physics, but the level of complexity involved in such choices is so great that our choices are unpredictable or free. Of course, critics argue that such a view on free will is not sufficient. The philosopher Jerry Fodor for example, feels that Dennett’s compatibilist explication of freedom only accounts for a pseudo-freedom; it falls short of a metaphysical freedom, a “freedom tout court.”⁶⁵¹ Murphy offers a similar critique, suggesting that Dennett only explains how “complex machines could *appear* to have language, beliefs, morality, and free will” and fails to give a full account.⁶⁵² However, it is contested here that the view of free will put forth by Dennett is again more coherent with a naturalistic ontology; there is no reason why we should expect consciousness to be exempt from the causal processes of the world. This understanding of freedom, it is argued, is sufficient to account for human free will, particularly as it concerns the moral worth of actions. Free will can be understood as congruent with a seamless causal system – in sum, a naturalistic, material ontology, even one which understands the mind as a

⁶⁵⁰ Ibid., p. 162

⁶⁵¹ Jerry Fodor, ‘Why Would Mother Nature Bother?’ *The London Review of Books*, 25.5 (2003) p. 17

⁶⁵² Nancey Murphy and Warren S. Brown, *Did My Neurons Make Me Do It?*, p. 298

physical entity, does not preclude free will; the fatalism that may be presumed to stem from a material ontology can be overcome.

5.2 Freedom and Hope

It is argued then, that freedom can be compatible with a naturalistic/material ontology, if freedom is viewed as an incomprehensibly vast array of alternative brain states. If we accept this reading of free will (a genuine but physical free will), then we can subsequently state that our actions have moral worth. It does not diminish the significance of moral freedom if freedom is equated to the degree of alternative possibilities open to our brains, responsiveness to our environments and our ability for self-reflection. Dennett acknowledges this point, "... a naturalistic account of decision making still leaves room for moral responsibility."⁶⁵³ The fact that moral decisions are not 'cause-free' or ontologically indeterminate does not preclude them. Kant outlined a similar argument, though in a somewhat different context, as he argued that moral decisions must have reasons as their causes – they are not undetermined.⁶⁵⁴ I advance this argument further here, and suggest that not only does a naturalistic account leave room for moral responsibility, but the evolution of free will and a moral sense can actually be interpreted as more significant on a naturalistic and non-teleological view, rather than as something ontologically distinct, such as a pre-established morality or dualist position.

If morality was inevitable, its significance might then be considered to be mitigated; as noted in previous chapters, I attribute some significance to novelty. The fact that certain events transpire is given greater significance when such events were not inevitable – this is not to say that inevitable events have no significance, but that inevitable events would have less significance than evitable events. This argument was stated in

⁶⁵³ Daniel C. Dennett, *Freedom Evolves*, p. 226

⁶⁵⁴ Immanuel Kant, *Groundwork for the Metaphysics of Morals*, pp. 63-66

section 3.3 though in a wider context; I argued that foreseen evolutionary developments may have less significance than developments in an open, non-teleological system. Of course, one could disagree and state the contrary; that an absence of teleology is not a prerequisite for significance. However, as it was argued in previous chapters, I contest that foreknowledge does in fact diminish the significance of events, as in the example of viewing a sporting event already knowing the outcome. Although significance may be gained in certain respects from foreseen events, it is contested that significance is at least to some extent dependent on novelty. The fact that freedom can be the result of combinations of mindless particles of matter is the remarkable point, indeed I argue more remarkable than had it been specially created or ontologically distinct. Had moral freedom been inevitable or planned, then it would not carry the same significance that one can attribute to it from the perspective of a material worldview.

Arthur Peacocke makes a similar point, though as discussed in the previous chapter I differ from him with regard to his belief in divine interaction. He posits the question which I address here, “... how are we properly to interpret the cosmological development (or the development of the cosmoses) if, after aeons of time, the fundamental particles have become human beings, have evidenced that quality of life we call ‘personal’?”⁶⁵⁵ I suggest that this premise, the evolution of morality and freedom from mindless matter, be interpreted as offering a glimmer of hope in what would otherwise be nihilistic world.

Although ‘hope’ is used here as a term which stands in opposition to nihilism, this is not to posit ‘hope’ as the direct opposite to nihilism; of course, one can maintain an ontological nihilism yet find a subjective notion of hope. Indeed, as I will argue, hope can be found through the evolution of goodness/morality, which may be subjective. Whilst the idea of hope I argue for will be considered in this context to be somewhat theological, I do not

⁶⁵⁵ Arthur Peacocke, *Creation and the World of Science: The Re-Shaping of Belief*, (Oxford: Oxford University Press, 2004) p. 73 [Originally published 1979]

conversely equate atheistic/secular visions of the world with nihilism (though atheistic perspectives on the universe would seem to imply an ontological nihilism). Therefore, whilst I propose 'hope' as a term used here in opposition to nihilism, these terms are not diametrically opposed in every context. Moreover, although my understanding of hope is theological, it is not eschatological in the sense that other theologies of hope have been, such as those discussed in Chapter Three. Hope is understood here as pertaining to meaning or purpose; something more than arbitrary interactions of atoms and matter. Whether this hope is considered purely subjective (as in an atheistic outlook) or indicative of theological 'depth' (discussed further in Chapter Three) is not the primary concern in this project, though I am in favour of the latter view.

Counterfactuals

A difficulty with the argument that the evolution of morality may provide a crevice in an otherwise nihilistic world is the absence of a frame of reference or counterfactual world. Notwithstanding, it is possible to conceive of alternatives, and suggest whether such alternatives would be considered nihilistic, or whether the evitable evolution of morality as it has transpired could be deemed more significant. For the purposes of illustrating why the evitable evolution of ethics offers us hope in opposition to nihilism, three categories of worlds will be briefly considered; a universe with no life, a world with no evolved morality, and a world not with evolutionary morality but a preordained, inevitable morality. Firstly, one could envisage a universe with no life, or indeed a wider conception of the non-existence of the universe itself. Such worlds would appear nihilistic; being absent of purpose or value, particularly if as argued in Chapter Three, the antitheses of nihilism (notions such as value and teleology) only fully emerge with human life.⁶⁵⁶ Nihilism is not understood

⁶⁵⁶ However, this is not to say that non-human life has no purpose or value, given that in an evolutionary worldview, such issues exist as matters of degree.

here as an existent force in itself but rather as the absence of value/purpose, and thus could exist in a world absent of life – it can exist in our conceptions of such a world.

A second category of counterfactual worlds also illustrates the due significance attributed to the evitability of morality and how it provides hope in opposition to nihilism; a world with evolution, but without the evolution of moral sentiments. As discussed in the previous two chapters, the portrayal of evolution adopted here is one which operates within the framework described by Monod as chance and necessity. As Gould noted in his analogy of winding the tape of evolution back, it is highly unlikely that anything like human beings would emerge in an evolutionary process. Consequently, if morality is only considered as such – that is differentiated from functional behaviour construed as altruistic – when it emerges in humans or other hypothetical self-reflective life, then morality too can be considered highly unlikely. Moreover, a premise set forth in previous chapters was that teleology or value only exists at the level of human consciousness. Without these values, as in non-human life or a conceivable alternative evolutionary world where moral sentiments did not evolve, the world could be considered nihilistic; it would be devoid of values or purpose. Of course, this raises the important distinction between ‘values’ and ‘value’; arguing that non-human life does not have values is not to suggest that it does not have value – this is a different, ethical issue.⁶⁵⁷

A third category of worlds, a world with a pre-ordained, inevitable morality is easier to conceive, given that the pre-evolutionary orthodox approach would fall into this category; that is the approach discussed in Chapter One drawing on the traditional theological narrative of a pre-established (and thus, inevitable) good. On this perspective, values existed and moral actions were given significance. However, the important clarification which needs to be made, as discussed in Chapter One, is that moral actions

⁶⁵⁷ For an example of such discussion, see Peter Singer, *Practical Ethics*, (Cambridge: Cambridge University Press, 1999) pp. 55-82 [Originally published 1993]

were given significance in part as a result of free will, in the view of Aquinas, for instance.⁶⁵⁸ It is again, this central notion of freedom which gives moral actions their significance. The absence of moral freedom would severely diminish the meaning of morality, as expressed in the seventeenth century Unitarian objection to predestination; the *The Racovian Catechism* for example, makes an objection to predestination in terms of God's punishment, "And when God punishes the wicked, and those who disobey him, what does he but punish those who do not that which they have not ability to execute."⁶⁵⁹ Therefore, in a non-evolutionary view, an inevitable, preordained morality can still be significant if the concept of moral freedom with regard to moral actions is acknowledged.

Notwithstanding, it can be suggested that such a pre-ordained morality is less significant than a non-inevitable morality, given that a non-inevitable morality also introduces freedom at the level of the metaethic. In short, moral actions are considered to have worth when they are not inevitable but free. I argue similarly, that the existence of morality has greater worth as it was not inevitable. These two views are not completely dichotomic, given that moral significance can still exist in a world with a pre-existent, inevitable morality; in this case, perhaps this world would not be nihilistic. Yet I argue that a non-inevitable morality can be more significant.

John Hick outlines a similar premise, though in the context of his soul-making theodicy. Hick argues that a world with a pre-ordained hedonistic paradise would not lead to as valued a moral sense as the exploration of the potentialities of human personality.⁶⁶⁰ I argue a similar sentiment though with respect to metaethics; a perfectly planned and instilled framework for morality might not be devoid of significance, if free will exists at the level of moral actions, though it might be less significant than a world in which metaethics was not

⁶⁵⁸ Thomas Aquinas, *Summa Theologica*: I, 83.1

⁶⁵⁹ Thomas Rees trans. and ed., *The Racovian Catechism of 1605: A Sketch of the History of Unitarianism in Poland and the Adjacent Countries*, trans., (London: Longman, 1818) p. 333 [Originally published 1605]

⁶⁶⁰ John Hick, *Evil and the God of Love*, p. 258

inevitable. In this respect, I am attributing freedom not just to the level of the moral action, but also to the level of the metaethic. John Haught expresses a similar outlook, though in a wider context than morality. Although Haught's approach to teleology was discussed and ultimately rejected in Chapter Three, he does acknowledge the theological importance of evitability, "Contingency, for instance, may be troubling to those fixated on the need for design in nature, but an openness to accidents seems essential for creation's autonomy and eventual aliveness."⁶⁶¹ The evitability of the world, and in the context here, morality, gives it greater 'aliveness' or significance.

In comparison with conceivable alternative categories then, it can be evidenced that a world which exhibits the evitable evolution of morality offers hope in a world which could otherwise be considered nihilistic. In the three categories of other counterfactual worlds considered, the first two, a world without life and a world without moral sentiments, are argued to be considered nihilistic. The third category, which encompasses the orthodox conception of the world in pre-evolutionary thought, may not be considered nihilistic given that it exhibits morality and stresses the importance of free will with regard to moral actions. Nevertheless, it was argued that an evitable morality in the evolutionary view could be seen as more significant than an inevitable morality, as with a pre-established good. It might not be that the preordained vision of morality is completely insignificant or completely nihilistic, and thus not diametrically opposed to the current understanding of morality conceived. In any case, based on our current scientific understanding as explored from the context of a naturalistic ontology, it would seem that only the first two categories of worlds (and of course our own) are actually possible.

Russell's words in the previous section, that a material worldview would imply a world with no freedom, can be overcome by incorporating Dennett's notion of evitability

⁶⁶¹ John Haught, *Christianity and Science*, p. 94

and the incomprehensibly vast degree of alternative decisions we have available to us. Therefore, our freedom offers us the ability to avoid the ‘inevitable’ – it allows us to avoid the conclusion of nihilistic fatalism. Our freedom allows us to contradict the apparent inevitability of a material world bound by the physical laws. Similarly, the fact that ethics evolved from a non-teleological, material world can be interpreted as offering a glimmer of hope. The world is not merely meaningless collocations of atoms, but goodness has emerged – thus we find a ‘get-out clause’ in a world which could otherwise be considered a nihilistic amalgamation of particles of matter. Goodness, I argued in Chapter Three, is a feature of depth, some profound ‘something more’. The view that this evolution of goodness was not *a priori* inevitable, I suggest, makes it more significant.

5.3 Theological Interpretations of Naturalistic Freedom

In further addressing the question posed by Peacocke above, I also put forth the suggestion here that the evolution of our moral freedom from material matter can be interpreted theologically; that evolved morality is reflective of the divine. It was stated in Chapter Three, that although morality is contested here to have arisen from the processes of evolution as understood through the field of sociobiology, human morality can in some senses be considered unique. I incorporated Sarah Coakley’s term ‘supernormal’ morality to serve this purpose. Similarly, human freedom can be considered unique; though there is no ontological difference between the freedom we possess and the freedom of a redwood tree, for instance, there are significant distinctions. Ontologically, human freedom differs from the freedom of a tree only in terms of degree. However, our level of self-consciousness has, as Teilhard suggested, pierced a significant boundary in biological evolution.⁶⁶² Dennett echoes this sentiment, “Whales roam the ocean, birds soar blithely overhead... but none of

⁶⁶² Pierre Teilhard de Chardin, ‘Turmoil or Genesis?’ p. 222

these creatures is free in the way human beings can be free. Human freedom is an objective phenomenon, distinct from all other biological conditions and found only in one species, us.”⁶⁶³

This degree of moral freedom, I suggest, is reflective of the divine; as stated in section 3.4, morality can be equated to what Tillich terms ‘depth’. Evolved ethics offers us a glimmer of something beyond the surface – beyond the purely physical events towards our ineffable experience (though to reiterate, this is not to state there is anything ‘more’ than the physical – see section 3.4). Viewing the remarkableness of evolutionary ethics and evolved freedom in this way does not discount the fully naturalistic explanations that have been explored and defended in this thesis, though it appreciates the ‘miracle’ of their evolution from a mindless world. Coakley suggests that the level of morality apparent in human life is not quite evidence of God, “but... manifestations which demand from us some sort of response both rational and affective.”⁶⁶⁴ On this point I agree, though to a lesser extent – evolved morality, in my view, is reflective of the divine, perhaps not quite a manifestation; I do not suggest that such morality has a direct, supernatural element. I argue, as stated in section 3.4, that such profound goodness as evident in human morality is indicative of depth.

Of course, this theological assumption may be challenged; why suggest that this supernatural morality is reflective of the divine? Coakley also acknowledges this caveat:

What we do still need to worry about, however, is the classic Humean point: that there is no reason why the agnostic or sceptic could not simply stop at the phenomenon of evolutionary order kindly supplied by game theory and merely now attribute it to the evolutionary processes themselves.⁶⁶⁵

⁶⁶³ Daniel C. Dennett, *Freedom Evolves*, p. 226

⁶⁶⁴ Sarah Coakley, ‘Teleology Reviewed’, p. 13

⁶⁶⁵ *Ibid.*, p. 18

Coakley offers a response to this caveat by suggesting that it seems impossible to account for supernormal morality in any way other than to consider its cause God.⁶⁶⁶ Alternatively, I do not suggest that God is the cause of morality – recall my espousal of a naturalistic ontology in the previous chapter which suggested that all causes were natural. I argue that morality which has evolved from mindless matter is reflective of the divine. In this sense, perhaps, my argument is more philosophical. Whilst I do interpret the evolution of morality as theological, it could also be stated in more general terms. The fact that goodness evolved offers us a glimmer of hope; with the advent of human moral conscience, we are not bound to a nihilistic inevitability, we can see hope in the evolution of the moral from the amoral, in the evolution of values from the valueless. Consequently, this gives motives for the establishment of an optimistic, hopeful worldview. In furtherance of this theme, I also turn my attention towards morality as it exists among humans and propose that morality is progressing.

5.4 The Expanding Moral Circle

A further aspect of an evolutionary view of morality that can contribute to a hopeful theology is the proposition that we are evolving or progressing morally; in a sense, we are becoming ‘more moral’. Before this is explored in more detail, it should be clarified that there is an important distinction to be made between this notion of moral evolution or moral development/progression, and teleology. Evolution, it has been argued here for scientific and theological reasons, should be viewed as decidedly non-teleological; it does not have a goal. A full and coherent picture of the world can be taken from a non-teleological naturalistic ontology which includes evolutionary ethics, to give us a picture of the world from the big bang to moral behaviour (noting that this picture is not yet quite complete).

⁶⁶⁶ Ibid., pp. 18-20

However, non-teleology does not discount the notions of development or progression in the realm of moral behaviour.

The nineteenth century Irish philosopher William Lecky hypothesised a circle of moral relevance which demarcates who might be the beneficiaries of our benevolent actions – the centre of the circle being those most relevant in a moral sense, with the degree of relevance decreasing as the circle expands. This circle, he suggested, at one time merely encompasses the family, but then extends to include “... a class, then a nation, then a coalition of nations, then all humanity, and finally, its influence is felt in the dealings of man with the animal world.”⁶⁶⁷ Lecky felt that our moral conscience was progressing given that we were in the process of extending our beneficence to more classifications of people, and indeed eventually animals. Whilst I will return to this point, I raise it presently to draw parallels with sociobiology. If we recall the theories of sociobiology discussed in Chapter Two, we can trace a similar expanding circle of moral relevance though in this case from a genetic perspective; altruistic actions emerge from natural selection as a result of the benefit they bring to copies of genes in their kin (kin selection). Such altruistic actions however, can then extend to include the group; an altruistic group’s genes may fare better in the fight for survival (group selection). In cases where organisms develop more efficacious memory, foresight and the ability to recognise others, individuals of a more distant relation can benefit from behaving altruistically towards each other given the prospect that such acts can later be reciprocated (reciprocal altruism). So as Lecky put forth the idea of our expanding moral circle from family to class to nation, sociobiology can also trace an expanding moral circle from kin to groups to unrelated individuals outside one’s group. Morality can thus be

⁶⁶⁷ W.E.H. Lecky, *History of European Morals: From Augustus to Charlemagne: I*, (London: Longman, Green, and Co., 1890) p. 107 [Originally published 1869]

considered developmental – or as philosopher Philip Kitcher terms it, an unfinished project.⁶⁶⁸

There is however, an important distinction between the moral development as explicated by Lecky and that of sociobiology; namely that of teleology. In the case of Lecky's expanding moral circle, such an expansion could be considered conscious, intentional, or indeed teleological. In the case of sociobiology, the developmental expansion of the moral circle is guided only by the laws of natural selection; it is not conscious, indeed, one could even question whether such behaviour should be classified as 'moral'. Peter Singer, who takes the title of his work *The Expanding Circle* from Lecky's quote above, notes this point as he states that when speaking in terms of genetic motivations, we are speaking in terms of consequentialism, and not in any normative ethical sense.⁶⁶⁹ Despite this clear point of difference, the evolutionary worldview espoused here sees no ontological discontinuity between the 'moral' behaviour evident in the natural world which is governed in general by genetic 'motives' and the moral behaviour of humans; consciousness and morality are evident in other animals – ours differs only by matter of degree. It can still be maintained though, that human consciousness is uniquely complex, and thus, it can be proper to speak in terms of intentionality with respect to human moral behaviour in a way which is not possible when speaking of altruism in ants, birds, etc.

As discussed in section 3.3.1, human consciousness represents a significant landmark in evolutionary history; as Teilhard and others suggested, it allows for an unreflective process to become reflective. It allows for a supernormal morality, or indeed, a supernormal freedom. Even on a material evolutionary worldview, it is still intelligible to speak of human nature and human morality in a normative sense – it was detailed in section 2.3.1 how evolutionary understandings of human morality do not limit its legitimacy.

⁶⁶⁸ Philip Kitcher, *The Ethical Project*, (Massachusetts: Harvard University Press, 2011) p. 2

⁶⁶⁹ Peter Singer, *The Expanding Circle*, p. 129

Moreover, as outlined above, human freedom understood in terms of the incomprehensible versatility of material brain states, need not deny freedom – even if it is not ontologically indeterminate. From this perspective, there is a development from our behaviour being governed more prominently by our genes, to being governed more prominently by our conscious thought. Our motives for moral behaviour are no longer purely associated with our genetic predispositions, but are now also predicated on our reasoned ‘good will’ to use Kant’s terminology.⁶⁷⁰ From this point, the development of conscious intentions now allows for teleology – we can consciously govern our moral behaviour for a purpose. In respect of teleology in moral development, the question arises of the *telos* or goal. I will address this question in the next section from a theological context

It is important to note that this understanding is not to convey a situation where our moral behaviour developed from one sphere (genetic intentions) to another (conscious or cultural intentions). The evolution of human freedom/morality is not a break in the causal chain – rather, it represents another, admittedly significant chapter in the long narrative of evolution. Conscious morality works in addition to evolved morality. Human conscious morality can be considered teleological in a way that pre-human morality cannot – though this teleology is an additional step in the development of morality and not an ontologically ‘new’ step as in the case of divine command ethics or divinely instituted goodness. In this regard, Singer suggests that viewing morality as evolved through nature “upset” the prevailing wisdom among psychologists – who generally focused on the cultural and educational development of our morals – as it suggests an innate morality.⁶⁷¹ However, evolutionary perspectives of moral development need not stand in opposition to developmental theories of morality; the two can easily coexist. Evolutionary ethics provides a substantial foundation for our understanding of where morals came from, but it does not

⁶⁷⁰ Immanuel Kant, *Groundwork for the Metaphysics of Morals*, p. 9

⁶⁷¹ Peter Singer, *The Expanding Circle*, p. 188

preclude our cultural influences. Again, even stalwart evolutionists will acknowledge the role of human conscious thought, and hence culture, education, and other factors in our morality.

This vision of morality as a long sequential development – conscious morality being another phase in the process – leads me to the argument that morality is continuing to develop. Altruistic behaviour became more prevalent in the evolutionary tree as the circle of relevance expanded from genes to kin to group, etc. even though at that point it might not necessarily be considered ‘moral’. After the advent of human consciousness however, speaking of such behaviour as moral becomes intelligible, though this does not mean that the chain of moral development is broken. Rather, it is continuous. Congruently, it is suggested here that humanity is continuing to develop morally – in short, we are becoming ‘more moral’ (note here the interesting parallels with John Hick’s understanding of Irenaeus in section 3.5.1). This sentiment was also put forth by Darwin – though he had not drawn the direct links between such moral development and evolutionary theory that I seek to here; he seems to be speaking solely in terms of human morality. Darwin suggests, “And it is admitted by moralists of the derivative school and by some intuitionists, that the standard of morality has risen since an early period in the history of man.”⁶⁷² More contemporary theorists have agreed, for example the linguist and political commentator Noam Chomsky, as he suggests that, “... my general feeling is that over time, there’s measurable progress – it’s not huge, but it’s significant.”⁶⁷³ Can this apparent moral progress be evidenced? I argue that it can, though somewhat tentatively.

The Berkeley philosopher Kwame Anthony Appiah offers a useful description of a moral revolution as a “rapid transformation in moral *behaviour*, not just in moral

⁶⁷² Charles Darwin, *The Descent of Man*, p. 80

⁶⁷³ Noam Chomsky, *Understanding Power: The Indispensable Chomsky*, Peter Michel and John Schoeffel eds., (London: Vintage Books, 2003) p. 356

sentiments.”⁶⁷⁴ On this definition, it could be argued that *in general*, rapid transformations in moral behaviour have been more numerous, prevalent and significant in recent centuries than over previous centuries or indeed millennia in human history. It is important that it is understood that I speak intentionally and consciously in general terms, and indeed tentatively on this point. There are obvious objections to the assertion that we are more ethically mature in recent history as there are salient instances of repugnant moral behaviour evident in the world today; violent conflicts in certain regions, for instance. Moreover, we are faced in modern times with immense ethical dilemmas of our own making; environmental issues, threats of nuclear war, or more ambivalent issues such as preventing aging, perhaps resulting in unsustainable population expansion.

Philip Kitcher also signifies moral subjectivity as a distinct objection which could be raised against the assertion of moral progression.⁶⁷⁵ Kitcher distinguishes between “mere change” – that moral codes change – and moral progression. It might be clear that moral codes have changed, though this cannot be taken as grounds for asserting progression. A presupposition of moral progress is that our current ethical code, or one we envisage following the future, is ‘better’ than a previous code or alternative code; in order to consider the concept of progress, one must adopt a form of moral objectivism and demand moral truths, otherwise, how could one moral vision be considered ‘better’? This issue can be overcome, Kitcher feels, by emphasising progress rather than truth; that progress brings truth, “ethical progress is prior to ethical truth, and truth is what you get by making progressive steps (truth is attained in the limit of progressive transitions; truth ‘happens to an idea’).”⁶⁷⁶ Moreover, Kitcher also points out that even when certain consensus are reached with regard to moral issues, human behaviour is so multifaceted that certain moral

⁶⁷⁴ Kwame Anthony Appiah, *The Honour Code: How Moral Revolutions Happen*, (New York: W.W. Norton and Co., 2010) p. xi

⁶⁷⁵ Philip Kitcher, *The Ethical Project*, p. 209

⁶⁷⁶ *Ibid.*, p. 210

progressions may not be “uncontroversially positive in all respects.”⁶⁷⁷ He notes that there may be disadvantages to certain moral developments, slight in comparison to the large positive gains, but existent nonetheless. He gives the example of increased freedom for women – a positive gain – which may bring about anxieties of newfound freedom, for instance.⁶⁷⁸ A more stark example could be the potential elimination of hunger – a positive moral gain – which may exacerbate the issue of unsustainable population expansion. Essentially, it is evident that moral progression is a complicated issue.

Those caveats being acknowledged, there have been substantial and expedient moral revolutions in the last few centuries, even in the last one hundred years, which have achieved a degree of moral consensus, even if we acknowledge the difficulties in asserting moral claims. For example, although violent conflicts still occur on a large scale, they are less frequent and incite more moral outrage than in previous times. Following the brutality of the Second World War, the United Nations was established in part, to “to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind.”⁶⁷⁹ Although critics such as American Historian Howard Zinn have argued that the United Nations is heavily influenced by Western imperialism, the establishment of such an organisation can be interpreted to represent a conscious progression in humanity’s attempts to better ourselves morally.⁶⁸⁰ It signified a global consensus that war was morally wrong and steps should be taken to avoid it. Similar developments such as the Geneva conventions (1864, 1906, 1929 and 1949) and the treaty on the non-proliferation of nuclear weapons (1970) can be taken as further evidence that humanity’s moral conscience is developing. Undoubtedly, there are political issues, ambiguities, and nuances that exist pertaining to such treaties, but these are far beyond the scope of this thesis. I merely seek to

⁶⁷⁷ Ibid., p. 212

⁶⁷⁸ Ibid., p. 212

⁶⁷⁹ Preamble to the Charter of the United Nations, <http://www.un.org/en/documents/udhr/> accessed 18th Dec. 2013

⁶⁸⁰ Howard Zinn, *A People’s History of the United States: 1492-Present*, (New York: Harper Collins, 2003) p. 415 [Originally published 1980]

use these examples as legitimate evidence of moral progression, despite their imperfections or multifaceted motivations.

Further evidence can be taken from the decline in prejudicial treatment of people based on “race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status”, to use the terminology of the United Nations’ Declaration of Human Rights.⁶⁸¹ Although of course, such declarations are not always honoured, the establishment of such a charter can be taken as further evidence of moral progress; a collective consensus on moral issues. In the last century, we have seen the enactment of civil rights in the United States in 1964 and the end of apartheid in South Africa in 1994 which were steps towards curtailing discrimination based on race. In my own country, Ireland, we have seen legal rights extended to curtail discrimination against women. For example, women were not permitted to maintain an employed position in the Irish public service after they were married until 1973, nor had they any legal rights to a family home once married until 1976, even if they were the sole income provider. Similar developments are evident with respect to discrimination based on sexual orientation; to again use Ireland as an example, homosexuality was decriminalised in 1993. Again, whilst these developments may be vulnerable to criticism from a variety of standpoints, I argue that they signal significant “rapid transformations in moral behaviour” to re-use Appiah’s definition of a moral revolution. They represent collective statements against various forms of discrimination. As Chomsky suggests, certain moral issues such as slavery and feminism have essentially been solved – not in the sense that there is no slavery or subjugation of women in the modern world, but in the sense that a moral consensus has been reached with regard to these issues.⁶⁸²

⁶⁸¹ Article II, The Universal Declaration of Human Rights <http://www.un.org/en/documents/udhr/index.shtml#a2> accessed 18th Dec. 2013

⁶⁸² Noam Chomsky, *Understanding Power*, p. 356

To further the argument that morality is progressing, the role that recent technological developments may have on moral progression must also be acknowledged. If we accept that moral progression stems from a widening of our circle of moral relevance, then the exponential growth in technological developments such as the internet and mass media could be playing a powerful role. The advances in global communications have led to a metaphorical shrinking of our global village – geographical boundaries no longer prevent communication between diverse cultures. As a result of globalisation, we are becoming more familiar with other cultures, and thus, more inclined to see each other as morally relevant. Moreover, the fact that moral atrocities can be communicated instantly and globally brings about a further moral awakening. A prominent example is the role of social networks in inciting the Egyptian revolution in 2010.⁶⁸³ Technological developments may be interpreted in this way as promulgating the expansion of our moral circle. Advances, particularly in communications, may be a serious contributory factor in the increasing number of moral revolutions in the last number of decades since the development of mass media; the extent of this would require a more full investigation of this point, which would be beyond the scope of this thesis, though may be a fruitful question for future research.

Appiah, who takes as examples the ceasing of practices such as duelling, foot-binding, slavery and honour killings to indicate moral progression, feels that such progression is driven by what he terms ‘honour’.⁶⁸⁴ Appiah’s use of the term ‘honour’ may be problematic, given that honour may also be associated with pride, and in some senses consequently, with practices he has already deemed immoral (his examples of duelling and honour killings are based on a certain understanding of honour). Appiah however, equates his understanding of honour with Hegel’s notion of *Anerkennung*, or in English, ‘recognition’. Hegel postulated that an unequal relationship, such as that between a lord and

⁶⁸³ Jose Antonio Vargas, ‘Spring Awakening: How an Egyptian Revolution Began on Facebook’, *The New York Times*, 17th Feb. 2012

⁶⁸⁴ Kwame Anthony Appiah, *The Honour Code*, p. xii

bondsman, prevents self-recognition in both parties. Self-recognition for Hegel is only possible in relation to an ‘other’ – it is the recognition of an ‘other’ as a self-conscious being. If this recognition is achieved, then the inequality of the master-slave relationship will be overcome.⁶⁸⁵ This concept of recognising others or acknowledging their ‘honour’ drives moral progress. As Appiah explains, a distinctive feature of the last few centuries has been a “growing appreciation of the obligations each of us has to other people.”⁶⁸⁶ Chomsky also agrees upon historical reflection, “Over history, there’s been a real widening of the moral realm. I think – a recognition of broader and broader domains of individuals who are regarded as moral agents, meaning having rights.”⁶⁸⁷

Darwin put forth similar sentiments, though again, his links between moral development and evolutionary theory were more implicit than those argued for in this thesis. He echoes Lecky in his description of the widening of who becomes encompassed as morally relevant:

As man advances in civilization, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to the men of all nations and races. If, indeed, such men are separated from him by great differences in appearance or habits, experience unfortunately shews us how long it is, before we look at them as our fellow-creatures.⁶⁸⁸

Although Darwin acknowledges this moral expansion, he also alludes to the fact that our moral sentiments are far stronger for our closer relatives, which would be consistent with the theories of sociobiology.⁶⁸⁹ Therefore, I suggest that although human conscious morality has

⁶⁸⁵ G.W.F. Hegel, *The Phenomenology of Spirit*, trans. A.V. Miller, (Oxford: Oxford University Press, 2004) pp. 111-119 [Originally published 1807]

⁶⁸⁶ Kwame Anthony Appiah, *The Honour Code*, p. xiv

⁶⁸⁷ Noam Chomsky, *Understanding Power*, p. 356

⁶⁸⁸ Charles Darwin, *The Descent of Man*, pp. 78-79

⁶⁸⁹ *Ibid.*, pp. 68-69

significantly developed from its biological roots, ultimately, the expansion of our circle of morally relevant others is a continuation of the expansion of ‘moral’ relevance in sociobiological theory.

This expansion of moral relevance, I argue, can be understood as a continuation of the expansion of beneficiaries of altruistic behaviour from genes to kin and so on through sociobiology – though of course, continually bearing in mind that such altruistic behaviour is consequential and not normative. The issue of whether this expansion of moral relevance is teleological then becomes apparent. This complex issue was discussed in wider terms in Chapters Three and Four, where I argued that there does not seem to be an *a priori* teleology in the evolutionary process. With respect to moral evolution, the same is argued to be true, given that the process itself is decidedly non-teleological. Philosophers such as Michael Ruse have argued that even though teleological language is beneficial for our understanding of biology, it is important that we acknowledge that such teleology is retrospectively attributed.⁶⁹⁰ Similarly, teleological descriptions of evolutionary ethics can only be validly discussed retrospectively. The absence of a discernable teleology in evolution does not, however, preclude notions such as development and progress. Consequently, it is maintained that the development or progress in evolutionary ethics, which was *a priori* non-teleological, continues today, and has become more expedient in recent centuries with the perennial expansion of moral relevance.

In addition, evolutionary theory may also exacerbate this moral expansion given that our knowledge of evolutionary theory indicates our close genetic relationship with other animals, which may be taken as support for extending our moral circle to include other animals. Singer addresses this question by suggesting that our genetic relationship to other animals as made known through evolutionary theory makes it “as arbitrary to restrict the

⁶⁹⁰ Michael Ruse, *Darwin and Design: Does Evolution Have a Purpose?* (Massachusetts: Harvard University Press, 2003) p. 269

principle of equal consideration to interests of our own species as it would be to restrict it to our own race.”⁶⁹¹ The potential for drawing ethical conclusions from evolutionary theory is not the central issue here; I merely seek to argue that the expansion of our moral circle is a development from the original, non-conscious, non-teleological expansion of ‘moral’ relevance evident through sociobiology theory – though evolutionary theory may also offer us reason to promulgate this moral expansion. This gives us reason to infer an optimistic worldview. The proposition that morality is continually progressing then, gives further support to a hopeful theology. At this point, a more specifically theological appropriation of moral progress will be discussed.

5.5 A Christian Interpretation of Moral Evolution

Throughout this thesis, a framework for understanding ethics has been sketched; I argue, a framework that, having acknowledged scientific advances and evolutionary theory, is more enriched and more coherent than the traditionally dominant frameworks of classical theology such as Augustine’s version of the fall/original sin – though this is of course not to understate the significant contribution to our understanding made by the Augustinian vision, as discussed in Chapter One. In a way that is consistent with theology and science, a representation of ethics has been presented from the origins of ethics to current moral progression. As this pertains to the central argument of this thesis, how evolutionary ethics can contribute to a hopeful theology, two distinct facets of hope can be discerned. Firstly, the fact that goodness and freedom emerged out of a purely material world offers a glimmer of hope in what might otherwise be considered a nihilistic, amoral universe of inevitability. Secondly, it is suggested that morality is in a process of development, from its origins as discussed in sociobiological theory to the current widening of our circle of moral relevance

⁶⁹¹ Peter Singer, *The Expanding Circle*, p. 120

which, I have argued, is in general, progressing significantly in recent human history. This view will now be incorporated into a Christian perspective and culminate with three theological conclusions; firstly, from a Christian perspective this evolutionary view on ethics gives us a teleological axiology. Secondly, it is an axiology that places emphasis on our present moral obligations, and thirdly, it suggests that we are making progress towards the moral *telos*.

The developmental vision of ethics under discussion fits neatly with theological representations appreciative of the evolutionary nature of the world such as the theological vision espoused in Chapter Three. However, comparative resemblance will not suffice for a full theological reading of evolutionary ethics. To further demonstrate how Christian ethics could be synthesised with this evolutionary approach, it is argued that Christian ethics may offer a *telos*; an end, purpose or goal. This goal, I suggest, is the Christian notion of *agape*, which I have already signified in Chapter Two as a key feature of my understanding of Christian ethics. The concept of *agape* or indiscriminate neighbourly love may be considered as the ultimate expansion of our morally relevant circle (however, and only for the sake of focus, I will not specifically address the question of whether animals should be considered morally relevant – I leave this question for future ethical research).

An expansion of the circle of moral relevance to include even one's enemies is, as discussed in Chapter Two, a distinguishing factor of Christian ethics. The expansion of who we consider morally relevant can be identified as a key feature of the ethical thought of Jesus. As Hans Küng observes, the inclusion of enemies in our circle of moral relevance sets Jesus' ethical thinking apart from previous ethical systems, "It is typical of Jesus not to recognise the ingrained frontier and estrangement between those of one's own group and those outside it."⁶⁹² Among the numerous biblical instances where this theme in Christian

⁶⁹² Hans Küng, *On Being a Christian*, pp. 258-259

thought is conveyed, two distinct passages can be taken as examples; the Sermon on the Mount and the parable of the Good Samaritan – though biblical scholar John Piper in his study of Jesus’ love commandment indicates several alternative pertinent texts.⁶⁹³ At the Sermon on the mount, Jesus explicates his vision for an indiscriminate love, and an inclusion of enemies into our moral conscience, “You have heard that it was said, ‘You shall love your neighbour and hate your enemy.’ But I say to you, Love your enemies and pray for those who persecute you” (Matt. 5:43-44).

Similarly, the inclusion of ‘others’ in our moral circle who would have previously been excluded is evident in the act of the Samaritan; an act of kindness towards a socio-religious ‘other’ (Luke 10:30-37). In this parable, not only is the inclusion of others as morally relevant apparent, but it is the traditional enemy that provides the example to be followed, As Küng again explains, “... it sets up as an example, not – as Jesus’ hearers might have expected – the Jewish layman, but the hated Samaritan, the national enemy, the half-breed and heretic. Jews and Samaritans cursed each other publically in religious services and would not accept assistance from one another.”⁶⁹⁴ The call of *agape* transcends social and religious differences and recognises the other not only as morally relevant, but as an exemplar of righteousness. This is a Christian notion that, as theologian Ronald Green argues, envisages acts of compassion beyond the bounds of one’s community – broadening the circle of moral relevance.⁶⁹⁵ These two passages (the Sermon on the Mount and the Good Samaritan) can therefore be taken as exemplars of Christian *agape*; an unconditional love of distant others, even one’s enemies.

It is suggested then, that Jesus’ attempts to widen the moral circle to be inclusive of enemies and more distant others could be taken as a precursor to the visions presented by

⁶⁹³ John Piper, *Love Your Enemies: Jesus’ Love Command in the Synoptic Gospels and in the Early Christian Paraenesis*, (Cambridge: Cambridge University Press, 1979) pp. 4-5

⁶⁹⁴ Hans Küng, *On Being a Christian*, p. 260

⁶⁹⁵ Ronald Green, ‘Christian Ethics: A Jewish Perspective’, Robin Gill ed., *The Cambridge Companion to Christian Ethics*, (Cambridge: Cambridge University Press, 2005) p. 142

Lecky, Darwin and others noted in the previous section. Furthermore, on the Christian view, such an expansion is not merely developmental, but explicitly teleological. With respect to this issue, Küng makes an interesting observation about Jesus' motives for expanding the circle; his motives are a perfect imitation of God.⁶⁹⁶ If this theological point is acknowledged, and as I argued in section 3.4 that values reflect the divine/offer a glimmer of depth, then a decidedly theological and teleological addendum can be incorporated into the evolutionary view of ethics. Altruistic behaviour emerged from a non-teleological process, but if conscious human values are taken to carry theological connotations, i.e. reflect divine values, then human moral evolution can be considered teleological; it is widening to a point of ultimacy which seeks to, as Küng states, imitate God. Jesus' ethical vision of the inclusion of morally relevant others can be taken as an indicator of this teleology.

Notwithstanding this argument, I do not suggest that the now teleological expansion of moral relevance is exclusively Christian; other traditions may exhibit similar or identical goals. Here is where I depart from a number of other contemporary scholars' treatments of theological readings of evolutionary ethics such as Neil Messer and Sarah Coakley; I take the Christian idea of indiscriminate love of enemies as the epitome of expanding the circle of moral relevance, rather than the explicitly theological aspects of Christology such as salvation.⁶⁹⁷ The developmental understanding of ethics, which stems from an appreciation of evolutionary understandings of ethics is also reminiscent of other Christian ethical frameworks in important respects; the teleological widening of the circle of

⁶⁹⁶ Hans Küng, *On Being a Christian*, p. 260

⁶⁹⁷ Neil Messer, *Selfish Genes and Christian Ethics*, pp. 211-215; see also, Sarah Coakley, 'Teleology Reviewed', pp. 19-20. Note that on this point, my position would be closer to Coakley's than Messer's, given that she stresses it is the Christian example of moral living that is supernormal – though again, she draws more direct theological conclusions by stating that such morality is inexplicable without reference to the divine, whereas I suggest that such supernormal morality is reflective of the divine. I consider the evolution of altruism as depicted in sociobiology coupled with human consciousness sufficient for explaining all moral behaviour; the ultimate origin of moral sentiments can be accounted for by sociobiological theory, whilst individual moral actions can be accounted for by human free thought.

moral relevance could be seen to echo Aquinas' notion of the divine law as an end.⁶⁹⁸ Yet Aquinas believed that this was an end for all things, where I argue that an "imitation of the divine" through moral conduct can only truly be considered as an end in relation to human consciousness; our understanding of the evolutionary process and a naturalistic ontology suggests a non-teleological world. As I have stressed, it is the fact that goodness and teleological moral conduct emerged from the amoral, material world which gives it its due significance; it offers a glimmer of hope.

The Christian conscious expansion of the circle of moral relevance is thus interpreted as a further expansion of altruistic behaviour which sociobiological theory posits as the origin of morality. The fact that the Christian ethical programme as I understand it is conscious, with *agape* as its epitome, is a significant distinction between it and sociobiology. However, with the naturalistic ontology, there is no ontological difference between the two expansions. Thus, envisioning Christian ethics in this way is appreciative of evolutionary ethics, and ultimately I argue, emerges enriched; Christian ethics can envisage an overarching metaethic inclusive of the natural origins of morality. A full appreciation of evolutionary ethics and its naturalistic ontological context not only allows for a normative Christian ethics to be developed on the basis of neighbourly love, but actually contributes to it. Acknowledging the natural origins of the expanding moral circle, from genes to groups to individuals etc., though of course originally only by proxy of natural selection, may provide substantial motives to continue such an expansion consciously – again, this reiterates the similarities with the dialectical vision of natural law; a conscious reflection upon natural tendencies. We can evidence a historical, evolutionary tendency of an expanding moral circle, offering us a hopeful theology from a material worldview.

⁶⁹⁸ Thomas Aquinas, *Summa Theologica: I-II*, 91.2

In addition, as it was argued in section 3.6, whilst the developmental aspects of eschatological theologies (those of Teilhard, Haught and others) are appropriate interpretations in light of evolutionary theory, they may relegate our present responsibilities giving way to a promissory vision, which whilst hopeful, is too distant. Eschatological theology places the *telos* of God at the Omega. Yet our understandings of cosmological time indicate that this would seriously dilute our present responsibilities, given that the cosmological time-span is exponentially greater than that of our lives, or even of human history. However, the synthesis of Christian ethics and evolutionary ethics I have argued for above posits a very present *telos*. It is a *telos* that, in theory, is within the grasp of our lifetime – indeed, it was/is within the grasp of any human generation – though this is not to suggest that it will actually be realised; time will tell. It is a *telos* that is a part of a metaphysical framework for ethics, but a metaphysical framework that is not intangible; a realisable *telos*. The fact such a *telos* is actually within reach gives us further reason for a hopeful theology, perhaps more hopeful than the theologies of eschatology and futurity evident in Haught, Pannenberg, Rahner and others discussed in section 3.4.

Having reflected upon evolutionary ethics, a theological axiology can be developed; one that incorporates both Christian ethics and evolutionary theory. Three discernable features of this axiology emerge: Firstly, it is an axiology that provides us with a goal. This goal, moreover, is not cosmological in time scale or metaphysically eschatological, but inherently temporal. It is an immanent *telos*, in line with a hermeneutical emphasis on the earthliness of the Christian prayer, “*On Earth* as it is in Heaven” (Matt. 6:10) – though this hermeneutical emphasis on earthliness may be selective. An emphasis on earthliness does not contradict the emphasis on the transcendent, atemporal God espoused in the previous chapter, but rather focuses on the imitation or reflection of God – which could be understood as the Kingdom of God. The understanding of Christian ethics with a goal of

promulgating the expanding moral circle is presented in one sense, as a part of a metaphysical naturalistic framework. However, it is also presented dialectically from a theological perspective as an immanent coming of the Kingdom of God. God is understood as ontologically transcendent though immanently reflected in human values.

The second feature of this axiology is that it places serious emphasis on our present responsibilities. It is not complacent in awaiting a metaphysical, eschatological Kingdom of God at the Omega, but seeks to establish a Kingdom of God in the present. It seeks to continue the expansion of morally relevant others that I have argued is perennially increasing with general consensuses being reached with regard to war and to eliminating discrimination based on race, nationality, gender, sexual orientation, and so on; in other words, encompassing more peoples as morally relevant. The pinnacle of this expansion, I have suggested, is the Christian understanding of *agape*, though the question remains over whether we will reach this pinnacle. Nevertheless, it is an earthly pinnacle and a pinnacle that we are responsible for attaining. A third feature is, as argued above, that we are progressing towards this *telos*. Although there is undoubted misery in the world and morally repugnant acts are prevalent, when speaking in general terms, we do seem to be making identifiable positive progress. We have reason to infer an optimistic reading of this axiology given that we are coming closer to achieving the *telos* of Christian *agape*.

5.6 Conclusion

The scientific picture of the world, incomplete as it may be, offers then an ontological perspective which, I argue, can be understood to give hope. In a material and contingent universe, the moral evolved from the amoral; mindless matter became self-reflective, and the goalless process of natural selection produced altruism and eventually, the notion of *agape*. This evolution of values from the valueless offers, I argue, hope; it allows one to

proffer an overarching hopeful metaphysic, rather than viewing the world as nihilistic. In order to illustrate how it can be maintained that our actions are significantly free as to have moral worth, yet also that the world is purely physical, it was suggested in section 5.1 that freedom emerges from the complexities of the physical brain. This model of free will, it was argued, is sufficient for actions to have moral worth. Section 5.2 then suggested how this evolution of moral freedom may be understood to give hope. A theological interpretation of this hopeful understanding of the evolution of morality and freedom was then discussed in section 5.3, reiterating how values are understood in this context to be indicative of depth.

It was then outlined in section 5.4, how a developmental vision of morality can be taken from our understanding of sociobiology, which sees the further development of morality in humankind as a continuation of the development of altruistic behaviour in other forms of life. It was argued that, in general, moral progress can be evidenced among humankind in more recent times, from various international treaties to moral consensus being reached with regard to various modes of discrimination. This moral progress can be used to further contribute to a hopeful worldview. This hopeful understanding of moral progress was then appropriated from a Christian theological perspective in section 5.5, arguing that the Christian concept of *agape* can be considered as the *telos* of our moral development. It was argued that humanity is progressing towards this moral pinnacle that is potentially achievable in the present. Ultimately, then, a framework for understanding ethics can be proffered which demonstrates how evolutionary understandings of ethics can enrich Christian visions of ethics and provide a distinctively present hope.

CONCLUSION

In this thesis, a proposal was set forth for a hopeful theological perspective on the nature of ethics as understood within the scheme of evolutionary theory. It was contended that evolutionary theory should be treated as a substantive resource concerning the nature of ethics. This theological framework for envisioning good and evil was presented in line with particular presuppositions of Christian ethics; namely, that the epitome of morality lies with the unqualified extension of beneficence to all others, inclusive of one's enemies and in particular the most vulnerable. Retrospectively, we can portray the evolution of morality as developmental, from amorality to its epitome. However, it is only since the emergence of human consciousness and free will that morality can truly be considered teleological and be meaningfully differentiated from evolutionarily functional behaviour. An overarching vision was put forth which views altruistic behaviour as emerging from its origins as selectively beneficial to the point where human consciousness eventually advocates an unqualified expansion of moral relevance, explicated in this context in the Christian ideal of *agape* and neighbourly love.

Evolutionary theory offers us the best principles available to us to understand life, human life being one strand amongst hundreds of millions to have ever existed. The significance of human life is arguable; is it a trivial detail that through human life, the mindless matter of the universe has become mindful, or is it truly indicative of a wider purpose? In either case, what is clear is that we cannot be excised from the narrative of life. We are an element of it. The universality of our religious and moral experience are important facets of human life, and whilst these require higher-level analysis, it would be

negligent to ignore the perspectives offered by evolutionary theory; the best framework available to us for understanding life.

The pre-scientific reflections on our moral nature which constructed the traditional theological narratives have great insight – for example original sin, which parallels the natural competitiveness which lingers as a result of our evolutionary heritage. Yet these reflections need to adapt and take note of new reflections, particularly those which come with the strength of scientific verifiability. Although moral behaviour is highly sensitive to psychological motives and circumstances, to undervalue the influence of our biological history would significantly diminish the comprehensiveness of any analysis of human nature, be it philosophical, sociological or indeed in this case, theological. Anselm defined theology as ‘faith seeking understanding’ and it is felt that based on its predictive successes and experimental strength, the natural sciences offer us the clearest way to understand the natural world, including ourselves.

The scientific picture of the world presents the universe as a vast expanse of collocating atoms which *a priori* has no discernable goal or purpose in and of itself. Within this context too, the prevailing view of evolutionary theory can be summated in Monod’s expression of ‘chance and necessity’. Humanity has undoubtedly ascribed significant meaning to itself, though our place on the cosmic stage in relation to the vastness of the spatial and temporal scales made known through the natural sciences can seem disconcerting, and can lead to the interpretation of nihilism. However, the alternative may be even more disconcerting; a world that has a distinctive plan may lead one to believe that instances of evil are then the consequence and thus responsibility of a divine planner. It was argued against these interpretations that although the world is indeed an impenetrable causal web, it is not desolate or forsaken; goodness has emerged, through whatever improbability, and this it is argued, is indicative of depth, profundity and reflective of the divine. From the

material amoral universe of collocating atoms came the phenomena of the good. The incredibility of this facet of the universe offers us a glimmer of hope. In viewing the Christian vision of *agape* as the pinnacle of a moral development that has its origins in evolutionarily beneficial altruism, one can envisage a hopeful overarching view of ethics whilst being true to the picture of the world presented by the natural sciences.

Developing a theological worldview in conjunction with what we learn from naturalistic perspectives on ethics also provides a sense of immanence absent from the traditional U-profiled theological narratives of a paradisiacal past to be restored in an eschatological future. The viability of such narratives is deeply problematic in light of evolutionary theory in any case, but even still, the proposed naturalistic framework places emphasis on the achievability of the moral epoch in the present. It was optimistically inferred from an admittedly general overview of human moral history that we can be evidenced to be progressing morally; on the whole, equality and moral relevance is more prevalent now than in previous ages. Of course such a progression could not be systematic; indeed evolutionary theory itself differs from macro-physics in this regard – it operates largely through tendencies rather than inalienable laws. Notwithstanding, an expansion of the circle of morally relevant others, allegorically illustrated in the Christian tradition through the parable of the Good Samaritan, can be roughly traced.

In the first chapter of this work the departure point for the argument was explicated; the acknowledgement that theological understandings of the nature of ethics have been traditionally or classically framed in a certain way; namely that goodness was directly attributed to God and instilled in creation. The problem of the existence of evil thus required a theodicy. Addressing this quandary led to a framework for understanding good and evil depicted in the theological narrative as a paradise gone awry as a result of human fault, followed by a long period of suffering-as-punishment to be eventually redeemed.

However, the viability of such frameworks is precarious in light of the dynamic nature of evolution. Evolutionary theory challenges central facets of the classical vision, perhaps most saliently in terms of its postulation of a preordained good. Holding a vision of the nature of ethics that is at variance with our increasing comprehension of the natural world was argued to be untenable. Therefore, the need for a re-imagined metaethic was signalled in Chapter One.

Having acknowledged that evolutionary theory necessitates a reframing of theological metaethics, the question of the compatibility of evolutionary ethics and Christian ethics was considered in the second chapter. A particular understanding of what evolutionary ethics and Christian ethics were understood to entail was presented, followed by an analysis of potential conflicts between the two systems with regard to three central facets of Christian ethics; moral freedom, *agape* and neighbourly love, and natural law. It was argued that on my understanding of these two systems, conflict does not arise. Evolutionary ethics provides a scheme for understanding morality based on the principles of competition in natural selection which does not supersede Christian ethics but as illustrated later in this work, frames and enriches it. A normative Christian ethical system can coexist with an evolutionary understanding of the nature of ethics itself.

In order to provide a theological outlook that shifts from a pre-established good as in the traditional framework for good and evil, it was suggested in Chapter Three that aspects of contemporary theological approaches be reflected upon and refined. The developmental aspect of certain approaches to theology were incorporated given that it reflects the evolutionary nature of the world, however, it was argued that the explicitly teleological aspects of eschatological theologies are problematic in light of evolutionary theory. In addition, a developmental approach to theological metaethics as evident in Hick's representation of Irenaeus was noted as a partial response to the theodicy question which

was left unaddressed after the classical expiatory theodicy was discredited. Whilst Hick presented an overarching approach to theodicy, I argued that such an approach was only sufficient with regard to moral evil. Moreover, rather than postulating a future perfection to come (in an eschaton or afterlife), it was argued that evolutionary ethics provides a more immanent and present understanding of our moral responsibilities.

The need to address the problem of natural evil was the starting point for the fourth chapter, though it also sought to establish an ontology implied by the natural sciences and consider how this ontology might fit within a wider theological view. It was argued that the image of the world presented by the natural sciences is material and naturalistic; naturalism in this context was presented as an ontology that precluded any mode of divine interaction with the world, acknowledging that certain models of divine interaction could themselves be considered naturalistic. Arguments for such a view were premised on the predictive successes and coherence of science. Furthermore, the implications of teleological perspectives and divine interactions for the problem of evil were also considered and taken as further theological reasons to envisage an ontology preclusive of divine interaction. Whilst this perspective could be interpreted as inimical to religious outlooks, it was argued that a naturalistic ontology can be theologically appropriated apropos the themes of divine kenosis, autonomy and atemporality. Envisioning the world in this way, however, presents a distinct problem for the theological presuppositions of a God of values – namely, the interpretation of nihilism.

The culmination of this thesis was reached in Chapter Five, where it was suggested that a turn to a compatibilist model of free will can reconcile the materialism of a naturalistic ontology with the necessary prerequisite of morality; freedom. It was then argued that the distinctly evitable emergence of the moral from the amoral offers a glimmer of hope in a world that would otherwise be a valueless manifestation of interacting atoms. In addition, it

was argued that a vision of morality which noted the human conscious expression of morality as an additional development within the broader process of evolutionary ethics provides an overarching perspective on the nature of ethics. It is in this perspective that we can see hope, meaning and a reflection of the divine. It was also tentatively but evidentially argued that in general, there is a discernable progression within human morality; there is a more prevalent cohesion among humanity pertaining to moral relevance than in previous ages. This provides further hope from the evolutionary understanding of moral development. Finally, the Christian notion of indiscriminate neighbourly love was suggested as the *telos* for this moral development, providing a hopeful outlook that stresses the achievability of the Christian moral vision as well as our responsibilities in realising this vision.

Although this thesis has presented a new approach to envisioning theological metaethics, it is not suggested that this is the last word. I have advocated an overarching theological view with respect to ethics, though there is further discussion needed on the intricacies of this picture. I suspect that research will be needed to investigate or propose what actually constitutes the realisation of the Christian moral vision, given the difficulties societies have in establishing moral precepts amenable to all people. Moreover, whilst I have argued that the Christian notion of *agape* is the *telos* of moral development, this idea is clearly open to hermeneutical reflection; how broad is the Christian commandment of neighbourly love? Are primates, or even other mammals to be included? Framing ethics as a development from its naturalistic context rather than within the narrative of a fall may also have implications for the sources of moral authority; if ethics emerges as a reasoned reflection upon our nature, then what conclusions can be drawn with regard to scripture, tradition, fact/value distinctions, and other premises. Undoubtedly too, future scientific advances will present unforeseen moral dilemmas; for example, by envisioning mental

events as material, then what ethical rights would be afforded to potential artificial intelligences? These are fascinating potential issues that will require further reflection.

The theological framework advanced in this thesis allows one to envisage Christian ethics in a way that maintains the centrality of Christian ethics, understood here as *agape*, yet acknowledges the conceptual setting understood through the natural sciences as naturalistic and material. In acknowledging the naturalistic context/nature of ethics, it forces us to reflect on our responsibilities towards its development; ethics were not instilled from on high through a divine covenant but ultimately the result of the interplay between our reason and nature. The view espoused does not locate the *summum bonum* of goodness in an eschatological future or lost past, but rather as something to be strived for in the present. It is not a view resigned to nihilism or futility but advocates the establishment of an earthly kingdom which reflects divine values. It allows an ultimately hopeful vision which recognises the theological presuppositions of a God of values whilst being dialectically mindful of insights of the natural sciences. In humanity, we see a transition from altruism as evolutionary functional behaviour to a genuine morality. Therefore, we can provide a hopeful and enriched envisioning of the Christian moral challenge as a conscious extension of the unconscious natural development of goodness.

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SAMENVATTING

Het doel van deze studie is het articuleren van een theologische meta-ethiek die de aard van de ethiek accepteert zoals die begrepen kan worden in het licht van de evolutietheorie. Er zal worden betoogd dat een dergelijke theologische meta-ethiek kan worden geïnterpreteerd als hoopvol en optimistisch, gezien de evolutie van moraal uit het amorele.

De beginselen van evolutionaire theorie kunnen worden toegepast om voorbij de grenzen van de biologie een *Weltanschauung* te ontwikkelen. Daarbij moet ook worden gelet op de aanzienlijke implicaties die de acceptatie van het wetenschappelijke denken heeft voor het denken over goed en kwaad. De auteur acht het van belang om te komen tot een hervorming van de theologische metaethiek op een wijze die volledige waardering toont voor de inzichten van de natuurwetenschappen in het algemeen, en die van de evolutionaire ethiek in het bijzonder. Daarom wordt in deze studie de theologische vooronderstelling van een op waarde gerichte God verweven met de naturalistische, materialistische vooronderstellingen van het moderne wetenschappelijke wereldbeeld. Het gaat de auteur daarbij niet om een theïstische interpretatie van evolutie of om apologetiek voor traditionele theologische overtuigingen, maar om het accepteren van de evolutionaire ethiek *in toto* en het integreren daarvan in een wereldbeeld waarbinnen de levensvatbaarheid van bepaalde theologische thema's opnieuw wordt geëvalueerd en een overkoepelende theologische metaethiek wordt gereconstrueerd.

In deze studie zal worden aangevoerd dat het in het licht van kennis over de evolutie noodzakelijk is te komen tot een herziening van theologische benaderingen van goed en kwaad voor zover die verbonden zijn met de gedachte aan een ‘zondeval’. Bij de beoogde herziening van de theologische metaethiek is het van belang dat de context van de evolutionaire theorie aandacht krijgt, ons wereldbeeld zoals dat mede bepaald wordt door de natuurwetenschappen. Verdedigd wordt dat zowel vanuit een wetenschappelijk perspectief als ook vanuit een theologisch perspectief, het meest geschikte wereldbeeld in ontologisch opzicht naturalistisch is. Onze natuurwetenschappelijke kennis over causale ketens in het universum én theologische bezinning op de problematiek van goed en kwaad passen bij een naturalistisch en niet-teleologisch wereldbeeld. Verhalen over een verloren gegane volmaaktheid in een paradijselijk verleden en verwachtingen ten aanzien van herstel in een eschatologische toekomst zijn niet levensvatbaar in het licht van de evolutie. Het voorgestelde naturalistische kader legt de nadruk op de betekenis van moraal in het heden.

In de menselijke morele geschiedenis, zo wordt hier verdedigd, is er op hoofdlijnen morele vooruitgang, bijvoorbeeld in het denken over morele gelijkwaardigheid van verschillende groepen mensen. Er zijn tegenslagen, maar globaal is er sprake van een voortdurende uitbreiding van de kring van moreel relevante anderen. Deze verbreding wordt in de christelijke traditie allegorisch gepresenteerd door de gelijkenis van de Barmhartige Samaritaan. Het theologische kader dat in deze studie naar voren wordt gebracht, maakt het mogelijk een christelijke ethiek te overwegen op een manier die centrale motieven van de christelijke ethiek zoals in het bijzonder *agape*, naastenliefde, behoudt, met erkenning van het natuurlijke, materiële karakter van het menselijk bestaan, zoals zichtbaar gemaakt door de natuurwetenschappen. Indien we het naturalistische kader van de ethiek erkennen, dan moeten wij nadenken over onze verantwoordelijkheid in het gebeuren; ethische oordelen zijn niet rechtstreeks door God gegeven, maar het resultaat van wisselwerking tussen sociale

natuur en redelijke reflectie, zoals die plaats heeft in ons en plaats had in vele voorafgaande generaties. In het hier gepresenteerde perspectief is het *summum bonum*, het hoogste goed, niet gelegen in een eschatologische toekomst of een verloren verleden, maar te beschouwen als een ideaal waar in het heden naar kan en moet worden gestreefd. Deze evolutie-accepterende benadering impliceert géén nihilisme of zinloosheid, maar roept op tot het werken aan een aardse samenleving als een ‘Koninkrijk’ dat in de ontwikkeling goddelijke waarden weerspiegelt. Het biedt een mogelijkheid voor een uiteindelijk hoopvolle visie die de theologische vooronderstellingen van een op waarde gerichte God erkent maar zich ook rekenschap geeft van de inzichten van de natuurwetenschappen. We zien in de mensheid een overgang van altruïsme als evolutionaire functioneel gedrag naar echte moraal. Daarbij aansluitend, zo wordt hier betoogd, kan worden gekomen tot een hoopvolle herziening van de christelijke morele uitdaging als een bewuste uitbreiding van de onbewuste natuurlijke ontwikkeling van goedheid.

CURRICULUM VITAE

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