

REINHOLD NIEBUHR'S THEOLOGICAL ANTHROPOLOGY IN LIGHT OF
EVOLUTIONARY BIOLOGY: SCIENCE SHAPING ANTHROPOLOGY SHAPING
ETHICS

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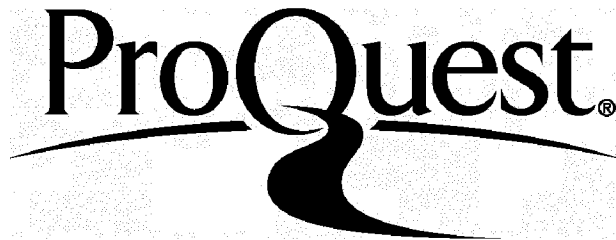
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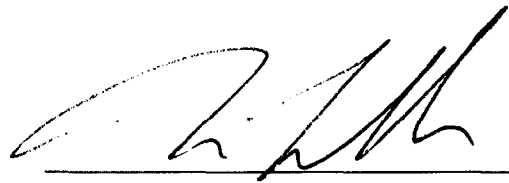
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This dissertation argues that when Reinhold Niebuhr's anthropology is informed by evolutionary biology, the resulting framework provides increased moral significance for relationships of humans with each other and non human creation and reemphasizes humanity's responsibility as created co-creators. After exploring briefly the life and context of Reinhold Niebuhr, his criticism of his contemporaries' response to science is used as a starting point to placing his thought into conversation with insights from the theology and science dialogue. In order to further this conversation, the details of Niebuhr's anthropology with special attention to sin are explored. In order to have a more fruitful dialogue the focus tightens in on the concepts of original sin and original righteousness. Niebuhr's understanding of these concepts is the starting point, but insights from the natural sciences as well as the theology and science dialogue are incorporated to re-imagine aspects of Niebuhr's anthropology.

The project concludes with examining three current issues in order to show that the conversation between Niebuhr's anthropology and science and religion not only changes the anthropology, but also has implications for theological ethics. These changes include methodological concerns for virtue ethics; original sin requires virtue ethicists to be more intentional about the kinds of friendships they form. There are also implications

for environmental ethics, where human relationships with other organisms can affect their relationship with God. Stewardship should also be re-imagined as trusteeship, where humans can benefit some from the rest of creation, but ultimately are meant to ensure the flourishing of the trust for all of creation. Finally, in the context of biotechnology, changes to human DNA could result in changes to human nature. Sin as pride and sensuality are both operative in the pursuit of biotechnology, so there should be guidelines to identify appropriate uses of biotechnology.



3/21/16

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Introduction

This dissertation argues that when Reinhold Niebuhr's anthropology is informed by evolutionary biology, the resulting framework provides increased moral significance for relationships of humans with each other and non human creation and reemphasizes humanity's responsibility as created co-creators. I argue that Reinhold Niebuhr's anthropology remains highly relevant today, but that it requires some updating. Given how Niebuhr was shaped by the events of his time, including how theology was responding to scientific and technological advancements, any attempt to apply his anthropology to current issues has to involve engagement with the theology and science dialogue.

The first chapter provides a brief history of Niebuhr, an attempt to place him and his work in context. I focus especially on his views of religious leaders' responses to science, as well as how scholars view his position which came to be known as Christian realism. These are significant because they are the starting point of bringing the theology and science dialogue into conversation with Niebuhr's work. Additionally, Robin Lovin identifies Niebuhr's ethical method as a nonreductive ethical naturalism which furthers the connection with the theology and science dialogue, but also furthers my assertion that there are advantages to reading Niebuhr in a virtue ethics framework.

The next step in the process is to explore the details of Niebuhr's anthropology. His two aspects of human nature continue the openness to the theology and science dialogue, because the creaturely aspect of human nature necessitates insights from the sciences to understand human essential nature. Sin plays a central role in Niebuhr's anthropology, both individual and corporate. Niebuhr is thoroughly Augustinian in his

understanding of sin, which has led some to criticize his interpretation. I examine feminist critiques of Niebuhr's understanding of sin, as well as critiques of these critiques. The concerns raised in these critiques are meaningful and valid, though I argue that Niebuhr's framework can accommodate some of them already. These critiques, however, also further my own project in several ways.

Judith Plaskow argues that Niebuhr focuses too much on the negative parts of the creaturely aspect of human nature. I argue that human biological history provides insights into original sin, but Niebuhr's anthropology also allows for it to inform human prosocial behavior. Chapter three of this dissertation will focus on Niebuhr's understanding of original righteousness and how the sciences might inform it. The concerns over women's experience of self-sacrifice also highlight the advantage of reading Niebuhr in a virtue ethics framework, where self abnegation could never be accepted.

Chapter two focuses on the doctrine of original sin, providing a more specific point of departure for engagement with the theology and science dialogue. Just as Niebuhr's understanding of sin is Augustinian, his doctrine of original sin is grounded in Augustine, but I would argue there are differences. The most important difference is that Niebuhr does not view the fall as an historical event. This makes Niebuhr able to have consonance with the theology and science dialogue, but also contributes to seeing the transmission of sin in a different way. I explore the sources Augustine used in formulating his doctrine and how the controversies of his time shaped his interpretation. Niebuhr also examines the Pelagian controversy and how he sees it shaping the discussion of original sin. It is in this discussion that Niebuhr reaches the conclusion that sin is inevitable but not necessary.

The focus then shifts to engaging with the theology and science dialogue. Robert Russell provides an ideal starting point with his reflections on the inevitability of sin and thermodynamics. I present his argument, which serves as the groundwork for my own argument. Just as biology relies on and is constrained by physics, my exploration of the biological sciences and original sin relies on Russell's work. After rejecting several likely candidates, I settle on the concept of intergroup preference as a biological anchor for original sin.

Intergroup preference is something that scientists believe only humans and some primates possess, viewing the ingroup positively and the outgroup negatively.

Researchers believed that only humans were capable of forming ingroups based on abstract concepts, but experiments showed that macaques can as well. Preferring one's ingroup is not necessarily immoral, but moving to intergroup bias where the outgroup is vilified because they are not in the ingroup is where things become problematic. It is in this context where I argue that original sin, in the sense of inevitable but not necessary arises, also taking into account the corporate aspect of sin.

Chapter three brings Niebuhr's understanding of original righteousness into dialogue with science. Original righteousness, for Niebuhr, starts with a rejection of the notion of total depravity. If human nature is not corrupted completely by the fall, then there is still some aspect of it that allows for knowledge of the good, or what God requires. Niebuhr refers to it as a memory of original righteousness, but this is problematic because he also argues that since the fall is symbolic and not literal, that there was no time of original perfection prior to the fall.

Niebuhr grounds original righteousness in the theological virtues. Also the source of human freedom, the theological virtues provide the standard to which God calls humans. The problem is that even human reason is affected by sin; Niebuhr is not arguing for total depravity, but does believe that self-deception and failing to recognize the influence of sin can lead to the spread of sin, especially because requirements of the theological virtues are found in law. The specification of law outside of community can lead to a person universalizing their experience when it should not be, leading to misinterpretations.

Trying to identify biological anchors for original righteousness is more difficult than for original sin. I argue that cooperation and empathy are starting points, but that more work needs to be done. Cooperation led to changes in the way organisms interact with one another and may have helped shape human physiology in ways that lead to necessary mental capabilities. Empathy provides a basis for the capacity for self-transcendence. These are necessary but insufficient aspects of the memory of original righteousness.

In the final chapter, I engage with three specific issues to show how the insights from the theology and science dialogue inform Niebuhr's anthropology and how adjusting an anthropology can lead to changes in theological ethics. The first issue involves methodological concerns in virtue ethics. Niebuhr's revised anthropology requires paying attention to how the virtuous mean is determined in light of the reality of original sin. Original sin and original righteousness also present problems for how virtue ethics deals with the concept of friendship. Intergroup preference, coupled with specifying the law in community can lead to ingroup myopia, where the needs of the

ingroup are clearer and more important than the outgroup, leading to problems in specifying the law but also in finding the virtuous mean. People utilizing virtue ethics must form genuine friendships with people in the outgroup, or they will have an impoverished ethic.

The second issue I examine is environmental ethics, broadly classified. This includes how human relationships with other organisms can affect their relationship with God. I also argue that stewardship needs to be re-imagined as humans as trustees. God gives creation to all of creation. Humans as trustees can receive some compensation for watching over the trust, but they are supposed to maintain it, and promote its success in the future.

Finally I turn to biotechnology. Scholars often identify pride as a concern when examining the ethical issues of manipulating DNA, but I argue that sin as sensuality is also operative. There are compelling reasons to pursue biotechnology, but there are also concerns, especially because it is possible for humans to change their own nature through biotechnology. The final section begins to specify criteria that could be useful in determining the proper use of biotechnology.

Method

Theology of Nature

The dominant method I use in this dissertation is what is known as a theology of nature approach in the field of science and religion and this choice affects the structure of my argument. Ian Barbour defines contrasts theology of nature with natural theology, a comparison which I believe clarifies both methods. The starting point for a natural theology approach is “scientific data on which we might expect agreement despite

cultural and religious difference.”¹ The move then is from science to philosophy or theology. Proponents of Intelligent Design are a classic example of natural theology. They argue that the complexity found in nature, and the existence of structures like the eye, point to the existence of intelligence in some form that created these things intentionally.²

A theology of nature approach, on the other hand, begins with a theological commitment. Science is then utilized in order to reinterpret or modify an existing doctrine.³ Generally speaking, I begin with Reinhold Niebuhr’s theological anthropology, but I then focus in on his doctrines of original sin and original righteousness. Before I can bring the insights of science and the theology and science dialogue to bear on his theology, I must demonstrate that I have a proper understanding of his thought. This is also consistent with how Robert Russell uses physics to interact with Niebuhr’s doctrine of original sin, an approach which I expand to the biological sciences.

Ian Barbour argues in a theology of nature approach, how one views nature in general also affects God’s relationship with the world. Although I am assuming an evolutionary creation, I am not slipping into a natural theology approach. There is exhaustive literature on how the doctrine of creation is shaped by evolutionary biology. I am already operating in a world shaped by a theology of nature approach in relating creation and God’s relationship with creation to the natural sciences. And as Barbour rightly points out, the problem of evil is not the same in an evolutionary creation.⁴

¹ Science and religion 100.

² Ibid., 51.

³ Ibid., 100.

⁴ Ibid., 101.

Theodicy

The problem of evil is probably the largest problem facing contemporary theology, at least in the theology and science dialogue, which itself actually exacerbates the problem. While I cannot give adequate attention to theodicy in this project, it is impossible to engage in a dialogue between theological anthropology and science without mentioning the issue. It is said that evolution is how God creates, but many call into question its appropriateness as a tool of divine creation. The vast majority, over ninety-nine percent of species that have ever existed, are extinct. If God truly loves creation and is good, why would God allow so much predation, suffering, and death? There are those who try to mitigate the suffering in evolution by arguing that cooperation is just as prevalent as competition, and while this may be true, it does not provide enough of an answer.

While I believe that any theodicy will fall short of answering the question completely, I argue there are two elements that an adequate theodicy must contain, and they are relevant to this project. The first is a modification of what is referred to as the Augustinian free-will defense. Since evil is the privation of the good, evil is the result of an imperfect will choosing against the good.⁵ This is meant to serve both as a defense of the goodness of God and the method of creation. God, as all loving, could not create evil. Evil is not the intention that God had for creation, but is a consequence nonetheless. Evil does not come from God then, but from free choice.

There are two reasons that it is also a defense of the methods God uses to create. The first is that this is the best of all possible worlds, and that even with the evil that has

⁵ John Hick, *Evil and the God of Love*, rev. ed. (New York: Harper & Row, 1978), 65.

come from free will, it is better to have organisms that possess free will than to have no organisms with free will. This appears to be a very anthropocentric argument; humans as beings who possess free will are important enough to warrant the suffering seen in nature. The argument is not solely about humans, however, but also about God and what God desires for creation. In order to have creatures that have free will and could choose whether or not to be in relationship with God, God had to allow creatures to be free to choose against God's will, and there is ample evidence that humans choose against the will of God. Such choice must be allowed, however, in order for the kind of love that Niebuhr argues for in the ultimate law to exist. Without freedom, life would not be able to have that kind of relationship with God or with other life.

The other reason why this theodicy is a defense of the methods God uses to create is that it establishes a defense of evolution. Nancey Murphy and George Ellis, expanding on the work of John Hick, attempt to provide a more adequate account of evil in an evolutionary world. The problem, they argue, is that Augustine's theodicy does not factor in that human free choice cannot account for the suffering found in nonhuman creation, especially before the evolution of modern humans. In order to have beings like humans—free, intelligent life with morality—they must evolve. In other words, “[j]ust as sin is a necessary byproduct of the creation of free and intelligent beings, suffering and disorder are necessary byproducts of a noncoercive creative process that aims at the development of free and intelligent beings.”⁶ Morality would not exist without free choice; if all organisms were forced to act in accordance with God's will there would be harmony, but

⁶ Nancey C. Murphy and George F R. Ellis, *On the Moral Nature of the Universe: Theology, Cosmology, and Ethics*, Theology and the Sciences (Minneapolis, Minn.: Fortress Press, 1996), 247.

it would be a harmony through control, not freedom. In order for morality to develop, there needed to be a contingent world where suffering was possible.

The other element of any adequate theodicy is novelty and diversity. Evolution leads to the creation of many different kinds of organisms and relies upon genetic novelty for change. God must find value in the existence and flourishing of life, even if most of those forms of life have gone extinct. If God could choose to create however God wanted, and evolution was necessary for the creation of free, intelligent, morally capable organisms, that alone is insufficient to explain the biodiversity on earth. Nonhuman creation, in other words, has value outside of its contribution to the evolution of humans.

Chapter 1: The Double-Edged Sword of Self-Transcendent, Rational Animals

In order to accomplish the aim of this project, to place Reinhold Niebuhr's anthropology in conversation with contemporary science with the intent of identifying how such a dialogue also has implications for theological ethics, this first chapter introduces both Reinhold Niebuhr and his anthropology. There has been an increase in interest in Reinhold Niebuhr, and while people attribute this resurgence to numerous politicians on both sides of the aisle speaking to the merits of his thought, I argue that more people are paying attention to Niebuhr because his thought is still very much relevant for the context in which we live. Starting with biographical information about Reinhold Niebuhr, we can see how the issues of his time impacted his theology, which in turn can also apply to issues facing the world today.

Reinhold Niebuhr's perspective was shaped strongly by his heritage, education, early work experience, and major developments both nationally and globally. Niebuhr lived in a tumultuous time in world history. His experiences and the current events of his day deeply impacted Niebuhr's thought and approach.⁷ He spanned the time between two world wars and the recovery, both national and global, after each. His teaching career began shortly before the economic collapse that became the Great Depression. With an economic crisis, a country ideologically divided, and continued conflicts in various parts of the world, I think that Niebuhr provides a needed perspective today. Additionally, the question is how Niebuhr's perspective might be affected if he were to experience and

⁷ Richard Crouter, *Reinhold Niebuhr On Politics, Religion, and Christian Faith* (New York: Oxford University Press, USA, 2010), 19.

draw upon contemporary science and global issues. To gain more insight into Niebuhr's perspective and what it could offer a contemporary project in theology and ethics, Niebuhr must be placed in his context.

Niebuhr was concerned with how religion was responding to the insights of science in his time, leading him to develop the perspective of Christian realism. The contemporary science and religion dialogue addresses some of Niebuhr's concerns. With the foundation of Niebuhr's Christian Realism in place, the science and religion dialogue is even more useful to his perspective, especially because this dialogue also relies on a form of realism, critical realism.

Niebuhr's anthropology is too broad of a doctrine to be the starting place of meaningful engagement with the sciences. Once the framework of Niebuhr's anthropology is explained, I will focus on his understanding of sin. Sin plays an important role in Niebuhr's understanding of human nature, and the discussion of sin also allows for points of departure for dialogue with the sciences in the following chapters. Niebuhr's doctrine of sin has its critics, so the final sections of this chapter examine the feminist critique of Niebuhr's interpretation of sin, as well as critiques of these critiques. These critiques are important because they reinforce the benefits of interpreting Niebuhr's ethical method in a virtue framework. They also show the merit of my approach of placing Niebuhr's thought in conversation with the sciences to identify how human biological history could contribute to the positive aspects of human nature.

Reinhold Niebuhr and his Thought

Reinhold Niebuhr was born in Wright City, Missouri, in 1892, the third child of Gustav and Lydia (Hosto) Niebuhr. Gustav Niebuhr had emigrated from Germany in

1881 and became a minister. After Gustav passed away in 1913, Reinhold Niebuhr took over his preaching duties for the summer before starting at Yale Divinity School in the fall.⁸ After remaining at Yale for two years, receiving a Bachelor of Divinity and a Master of Arts, Niebuhr became the pastor at Bethel Church in Detroit, where he worked until 1928. His experience in Detroit had a profound impact on the way he saw the world.⁹ Niebuhr was an early community activist during his time there, founding or supporting a number of political groups. In the aftermath of World War I, disillusionment with nationalism was common, and pacifism gained popularity among the young theological minds of the time, certainly including Niebuhr.¹⁰ Further, as Charles Lemert notes, “Detroit and the false promises of Henry Ford’s calculating management of the production line forced the young pastor to reevaluate the liberal religious ideals learned at Yale, as well as the inadequacy of the Social Gospel liberalism that in the 1920s inspired socially conscious church people.”¹¹

Reinhold Niebuhr left Detroit in 1928 to take a teaching position at Union Theological Seminary (hereafter, Union). This move launched another extremely formative time for Niebuhr that included not only his experience at Union but also the impact of the economic crash of 1929 and the specter of World War II. Since Niebuhr did not have a Ph.D., some felt he was unqualified in academic circles and the first several years at Union he taught part time and his salary was not a part of the official budget. His

⁸ Charles Lemert, *Why Niebuhr Matters* (New Haven: Yale University Press, 2011), 3.

⁹ Kenneth Morris Hamilton, *The Doctrine of Humanity in the Theology of Reinhold Niebuhr*, ed. Jane Barter Moulaison (Ontario, Canada: Wilfrid Laurier University Press, 2013), 107.

¹⁰ Robin W. Lovin, *Reinhold Niebuhr* (Nashville: Abingdon Press, 2007), 1.

¹¹ Lemert, *Why Niebuhr Matters*, 24.

compensation came from a sponsor, Sherwood Eddy, a liberal writer and activist.¹²

However, it did not take long for the students and faculty at Union to recognize Niebuhr's gifts, and within two years he was named the Dodge Professor of Applied Christianity by a unanimous vote.¹³

Niebuhr married his wife, Ursula Mary Keppel-Compton, in 1931, and they started a family while he worked on his first major book, *Moral Man [sic] and Immoral Society*,¹⁴ published in 1932.¹⁵ The major theme of *Moral Man and Immoral Society* was that "society is immoral, thus resistant to moral man's idealized ethic of love." In later years he would regret the term immoral as too strong. In the 1930s it was strikingly apt to his theme. "The state, and the society it means to govern, cannot escape its roots in power – in domination in particular."¹⁶ In this book, Niebuhr was speaking against liberal thought, in both political philosophy and Christian thought.

Religious Responses to the Sciences

Niebuhr believed the greatest weakness in liberal thought was how people envisioned the solution to social problems. The argument he took issue with was that ethics and the social sciences did not keep up with technological advances, and this is what created the majority of social problems.¹⁷ In such a framework, the solution to the problems is progressive; with an increase in education, both moral and general, an

¹² Ibid., 102.

¹³ Ibid., 103.

¹⁴ Reinhold Niebuhr does not use gender-inclusive language in his text. I will modify the language where possible or use inclusive language in the discussion before and after quotations.

¹⁵ Ibid., 45.

¹⁶ Ibid., 47.

¹⁷ Reinhold Niebuhr, *Moral Man and Immoral Society: A Study in Ethics and Politics*, Library of Theological Ethics (Louisville: Westminster John Knox Press, 2001), 233.

increase in overall human intelligence, and time, humans will be able to solve these problems. What this perspective fails to take into account, Niebuhr argues, is the nature of group interactions, including corporate ego. Niebuhr contends that at the individual level it is possible to achieve justice between individuals within a group using reason and moral education, though it is difficult. On the other hand, he contends that this is impossible in the context of conflict between different groups.¹⁸ The pursuit of justice at this level will always require the use of force, or at least the threat of force and therefore social conflict is resolved through politics, not ethics.

Niebuhr criticized Christian thinkers for focusing too much on metaphysics at the expense of justice because they had to contend with science challenging what Niebuhr calls “personality.” Personality here is seeing reality as self-conscious and free, including God as creator, creation as a whole, and self-conscious individuals.¹⁹ Science challenges personality in two ways; the first is that science presents a view of the universe that is impersonal. The laws of physics do not require divine intervention, and even though the universe may have been fine-tuned for life, life is rare and accompanied by suffering.²⁰ The second way that science challenges personality is through technology. Referring to technology as “applied science,” Niebuhr argues that humans have compounded the impersonal nature of the universe presented by science through the construction of complex societies. The size of populations and the nature of institutions make human interaction more impersonal, and this complicates ethics because when things are less

¹⁸ Ibid., xxxi.

¹⁹ Reinhold Niebuhr, *Does Civilization Need Religion? A Study in the Social Resources and Limitations of Religion in Modern Life* (New York: The Macmillan Co., 1928), 6.

²⁰ Ibid., 5.

personal people tend to care less, but even when people feel strongly about something, the nature of society makes it hard to act.²¹

The threat of the loss of personality is dangerous for Christianity because the universe and individuals are bound together, mutually reinforcing the need for proper action. Niebuhr argues that Christianity needs the assumption that even though the universe may appear to be impersonal and meaningless, that in fact the ultimate end of the universe is ethical. The call to love one's neighbors comes from a love of God, creator of the universe. People also come to seek and know God through their interactions with others, recognizing that personality transcends material value. Metaphysics provides the foundation for ethics, but the former also relies on the latter as well.²² Niebuhr argued that because it would be too taxing to confront science simultaneously about metaphysics and ethics, the thinkers of his time chose what they believed was the easier of the battles, focusing on metaphysics at the expense of ethics. The answer, then, is for Christianity to argue against science's overly deterministic claims.²³

Science and Religion Dialogue Bridges Niebuhr's Thought with Contemporary

Science

The concerns Niebuhr had regarding the relationship between science and religion also have their place in today's context, but I believe that Niebuhr would be encouraged by the work being done in the theology and science dialogue, and that he would be

²¹ Ibid., 5-6.

²² Ibid., 7.

²³ Ibid, 8.

actively involved in the internal conversation of the field and in trying to clarify public misunderstandings. Science holds a more prominent place in contemporary society than in Niebuhr's time. Niebuhr lamented the determinism of science, but in some ways, things have only gotten worse. Reductionism is an essential component of science, but not all forms belong to proper science. Methodological reductionism is crucial to how science operates, but there are many scientists and lay persons who go beyond methodological reductionism to ontological reductionism. In other words, the totality of reality can be reduced to what is observable or testable. Such metaphysics leads people to argue that God cannot exist because the universe is random, without purpose or personality, and uncaring. Certainly Niebuhr's concerns about scientific determinism undermining the metaphysics of the universe appear to be warranted.

Scholars in theology and science, however, argue against the validity of ontological reductionism, and envision how God interacts with God's creation. Ontological reductionism is not science, but a philosophical position built on methodological reductionism. When people appeal to ontological reductionism, they are not appealing to science, but rather scientism. One can still hold the findings of science valid without ascribing to philosophical assumptions about the nature of reality that are outside the philosophical assumptions included in the discipline of science.

In trying to make sense of a God who acts through history on one hand, and a universe that by all observations is impersonal, scholars in theology and science debate divine action, how God acts in the world. Niebuhr would certainly see those who articulate an understanding of God acting in world as apologists for a Christian metaphysics, but I believe he would also see the connection between metaphysics and

ethics. Those who support God acting the world are either interventionists or noninterventionists. In other words, does God suspend or break the physical laws of nature in order to act? Interventionists hold that God does, where noninterventionists believe that God can act without violating the laws of nature. Noninterventionists further argue that God having to intervene does injustice to people's understanding of God. If God created the universe, why would God create in such a way that God has to violate the laws of nature that God created in order to accomplish God's will?

Noninterventionists articulate an understanding of creation in which God can act in the world, without violating the laws of nature, but acknowledge that such a position makes it difficult to identify where God is at work. If God is not violating the laws of nature, there is no scientific way to determine whether causation is coming from nature, or from God. A prominent noninterventionist approach looks to the indeterminism found in quantum mechanics to illustrate how God can act. No two particles can have identical intrinsic properties. Quantum mechanics has over 10 philosophical interpretations, but the Copenhagen interpretation articulates a position that there is indeterminism at the lowest level. In other words, there is no natural determination for why one electron has spin up and another has spin down. If this is the case, then God can act at the quantum level without violating the laws of nature. A noninterventionist perspective of divine action allows Christianity to speak of a creation in which God is truly active, but also allows for scientific insight that does not contradict divine action, even if the universe appears to be impersonal and random.

The science and religion dialogue also rises to Niebuhr's challenge by tackling the ethical aspects of science and technology in addition to the work in metaphysics. The

breadth of ethical issues scholars engage with, as well as the depth of engagement with the sciences, religious institutions, and the public is profound. Part of the funding to examine ethical concerns arising from the Human Genome Project went to the Center for Theology and the Natural Sciences, faculty and doctoral students at the Graduate Theological Union were part of the first ethics committee of the biotech company Geron, and Pope Francis' first encyclical centers on environmental concerns and climate change. Scholars in science and religion continue to be on the forefront of ethical issues in science and technology, including theologians and theological ethicists' interest in the transhumanism movement, a topic upon which the final chapter touches upon. It is clear to me that the field of science and religion attempts to avoid problems that concerned Niebuhr and provides a fruitful conversation partner.

Reinhold Niebuhr and Christian Realism

Niebuhr believed that liberal Christianity needed a new perspective. Its optimism did not take seriously enough the reality of power and evil. Niebuhr believed that this was especially true of political power. Niebuhr argued that humans were limited in what they could accomplish, that justice would never be complete in this life, and achieving any approximation of it would require the use of power. Although he was influenced by the Social Gospel movement, Niebuhr believed it to be unrealistic to assume that humans could, on their own, enact a perfect kingdom of God.²⁴

The position that Niebuhr adopted became known as "Christian realism." Robin Lovin, the leading scholar on Reinhold Niebuhr and Christian realism, argues that Niebuhr's Christian realism is a combination of several approaches and is "a complex of

²⁴ Lemert, *Why Niebuhr Matters*, 18.

theological conviction, moral theory, and meditation on human nature in which the elements are mutually reinforcing, rather than systematically related.”²⁵ Christian realism, moreover, is actually a composite of three forms of realism: political realism, moral realism, and theological realism. While I agree that Christian realism contains these other forms of realism I believe that Niebuhr’s articulation of sin, which I will detail below, shows that the connection between political realism and moral realism is more systematic than simply mutual reinforcement.

According to Lovin, political realism seeks to identify all of the elements that go into making political choice. As stated above, Niebuhr’s perspective was influenced by and is an answer to the Social Gospel movement coupled with the notion, according to Lovin, that “[a]dvances in scientific knowledge promised that this rediscovered ethic could be put into practice in a way that it could not have been in an earlier day.”²⁶ Niebuhr believed that it was not possible to simply apply Jesus’ ethic to social interactions to effect moral change; furthermore, even if it were possible to do so, the simple application of Jesus’ ethic could abolish checks on the balance of power within society.²⁷ Niebuhr asserts that morality alone cannot guide people’s actions, especially in group interactions. In society, politics governs, not ethics.²⁸ The concept of realism is difficult because many of the realities that shape conflicts are not easily discerned. People can appeal to values that at first glance may show no hint of self-interest. It is also

²⁵ Robin W. Lovin, *Reinhold Niebuhr and Christian Realism* (Cambridge England: Cambridge University Press, 1995), 4.

²⁶ *Ibid.*, 5.

²⁷ Reinhold Niebuhr, *An Interpretation of Christian Ethics*, Library of Theological Ethics (Louisville, Kentucky: Westminster John Knox Press, 2013), 39.

²⁸ *Ibid.*, 47-48.

possible that people are unaware that they are acting in ways that could serve their self-interest, because humans are good at tricking their own reason.

Moral realism is also a component of Christian realism. Political realism would argue that moral norms must be spoken of in the context of a society's understanding of morality. Moral realism, on the other hand, argues that the truth of moral claims is independent of what society says or what individuals may believe. For example, Niebuhr states that the command from God to love others is not based on mutual respect or an understanding of equality before God. People are obligated to love one another because God loves them. The grounding is in "the transcendent unity of essential reality."²⁹ This is not to say, however, that all moral claims are independent of the natural world completely. Moral realists can take a position that the truth claim of a moral norm is not based on natural properties or they can argue that "moral properties are supervenient on the natural properties of things."³⁰ Although Niebuhr sometimes argues from the first position, his version of Christian realism predominantly utilizes the second position.

Moral realists who hold a supervening understanding of moral properties use a method called ethical naturalism.³¹ Classifying Niebuhr's Christian realism as such can be problematic because Niebuhr often argued against naturalism. Even though he recognizes that naturalism is part of Christianity's heritage through the Hebrew people,³² he believes that it causes problems, primarily minimizing or eliminating the transcendent.³³ Niebuhr's concern that I mentioned earlier about the challenge to

²⁹ Ibid., 213.

³⁰ Lovin, *Reinhold Niebuhr and Christian Realism*, 14.

³¹ Ibid., 15.

³² Niebuhr, *An Interpretation of Christian Ethics*, 33.

³³ Ibid., 69.

personality that the sciences present is the same he expresses when speaking of naturalism. His quarrel with naturalism is focused specifically on reductive naturalism—the assumption that morality is reduced to the natural properties of things.

Lovin believes Christian realism is a nonreductive ethical naturalism,³⁴ and I agree there is ample evidence of this in Niebuhr's texts. In his book *The Nature and Destiny of Man*, Niebuhr looks to natural law when he speaks of the perfection of human nature,³⁵ which itself is normative but cannot be reduced just to biology. While humans have a creaturely aspect to their nature like other animals, humans also have “the capacity for indeterminate transcendence over the processes and limitations of nature.”³⁶ Unlike other animals, according to Niebuhr, humans possess a freedom that allows action contrary to nature, but even this freedom has some grounding in biological human nature.

I argue that Niebuhr is best understood in a virtue framework because of the nonreductive ethical naturalism he utilizes, as well as the attention he gives to natural law and the theological virtues. Niebuhr has a normative understanding of human nature, but it cannot be reduced to mere biology. In my assessment, Aristotle and Thomas Aquinas hold similar views regarding human nature. Aristotle's concepts of the virtues arise from his understanding of the human soul. Humans have two aspects to the nonrational and rational parts of their souls; they do share aspects of their nature with other nonhuman animals, but the rational aspects of the soul are particularly human.³⁷ Thomas Aquinas

³⁴ Lovin, *Reinhold Niebuhr and Christian Realism*, 15.

³⁵ Reinhold Niebuhr, *The Nature and Destiny of Man: A Christian Interpretation*, Library of Theological Ethics (Louisville, Ky.: Westminster John Knox Press, 1996), 141.

³⁶ Reinhold Niebuhr, *The Children of Light and the Children of Darkness* (New York: Charles Scribner's Sons, 1944), 3.

³⁷ Aristotle, *Nicomachean Ethics*, 2nd ed. (Indianapolis, IN: Hackett Publishing Company, Inc., 1999), 17-18.

agrees with much of Aristotle's understanding of human nature, but in addition to some changes, he also supervenes the supernatural. Human flourishing is the ultimate end for Aristotle, but for Thomas it is a proximate end; the natural end is good in its own right, but the true end for humans lies in the beatific vision.³⁸

In order to argue that Niebuhr's nonreductive ethical naturalism is compatible with an account of virtue ethics that is also an ethical naturalism that is nonreductive, I need to show that theological virtue ethics can be nonreductive. Though there are contemporary scholars who identify or are classified by others as Neo-Aristotelian ethical naturalists, such as Phillipa Foot and Alasdair MacIntyre, this is insufficient evidence. Scholars generally agree, however, that Aristotle himself grounded his virtue ethics in his understanding of human nature. The human soul has parts, and some of these parts correspond with other life forms. There are organisms such as plants that humans share a nutritive part of the soul with, but this is not the realm of the moral virtues. The moral virtues are related to the rational part of the soul. Although the virtues are natural in the sense that they arise from human nature, humans are not born virtuous. Individuals have difference traits and dispositions, and this affects the possibility of the acquisition of virtue. In other words, the genetic lottery plays at least a partial role in shaping whether individuals are more inclined to certain dispositions.

Virtues are stable dispositions that are the mean between an excess and a deficiency, and that mean differs from individual to individual. One person may be more inclined to courageous acts than another person is. People acquire the virtues through habituation. If a person wishes to be temperate, they need to act temperately. Part of how

³⁸ Aquinas, *Summa Theologica*, I-II, Q 3, A8, <http://www.newadvent.org/summa/index.html>.

one learns what it means to be just, courageous, or temperate is through moral exemplars. Because of this, some scholars describe virtue as a learned second nature, with the first nature being the realm of the natural sciences.³⁹ Though separating between first and second nature in this way is problematic at times, the distinction does allow the possibility for a nonreductive naturalism. If what is natural cannot be reduced to what the natural sciences say about human nature, then reductionism can be avoided.

Thomistic virtue ethics are not subject to the same concerns regarding reductionism, because such a perspective is theological and appeals to the supernatural. Although Thomas Aquinas utilizes Aristotle's account of virtue, he builds upon it. Aristotle may provide insight into the natural ends of human flourishing, but the ultimate end of humanity lies in the Beatific vision, in union with God. This is a supernatural end that is not in conflict with the natural end; rather the supernatural supervenes on the natural. The virtues remain linked to human nature, which for Thomas also includes the structure of the soul. The theological virtues, however, come from God and are not acquired in the same way as the moral virtues.

There are criticisms of ethical naturalism, but I argue that the response to them is similar enough in Niebuhr's perspective as compared to a theological Aristotelian/Thomistic perspective that there is consonance. A fundamental criticism of ethical naturalism focuses on the problem of perspective. A virtue ethics based in ethical naturalism has to determine what the virtues are, but the criticism is that such an

³⁹ Soran Reader, "New Directions in Ethics: Naturalisms, Reasons and Virtue," *Ethical Theory and Moral Practice* 3, no. 4 (December 2000): 356.

evaluation is impossible without a first-person perspective.⁴⁰ A person with a standpoint determines what the virtues are; an appeal to the objectivity believed to be found in science cannot determine what humanity's virtues are. Ethical naturalism, therefore, is insufficient for determining the virtues.

A second criticism of ethical naturalism is that if the good is defined as fulfilling one's purpose as a human and that purpose is based solely on nature, then human flourishing is not that different from the flourishing of other species.⁴¹ Social animals, according to Hursthouse, have four natural ends, and these ends are both individual and social in pairs. Individual survival is the first end, but I argue that it is paired with the second: reproduction, or the continuation of the species. The third and fourth ends are similarly related. Individuals have the end to be able to pursue pleasure and avoid pain, but the fourth end is the well-being of the social group.⁴² Individuals who achieve these ends would be seen as flourishing, but the problem is that this kind of flourishing does not seem to speak to the virtues or to morality in general.

In order to make sense of this second critique, I will use a non-living example. Cars are manufactured and people purchase them for various reasons. The car was created with purposes in mind. It is meant to serve as a form of transportation, for people, goods, or both, to get from one place to another, protecting its cargo from the elements along the way. A car that is fulfilling its end could be seen as a flourishing car, especially if the engine is tuned, the fluids are at the proper levels, etc. A good car, in this sense, can

⁴⁰ David McPherson, "To What Extent Must We Go Beyond Neo-Aristotelian Ethical Naturalism?," *American Catholic Philosophical Quarterly* 86, no. 4 (Fall 2012): 632-633.

⁴¹ *Ibid.*, 627.

⁴² Rosalind Hursthouse, *On Virtue Ethics* (Oxford: Oxford University Press, 1999), 202-207.

be used in all sorts of ways, for commutes and errands, vacations and leisurely drives, or helping or hurting people. A good car can transport stolen property, it can transport food and supplies to people in need, or it can be the cause of death for someone with whom it collides. In other words, the natural end of the car does not necessarily provide insight into the moral use of a car.

I would argue, however, that both of the criticisms above are critiques of reductive ethical naturalism specifically, and not of nonreductive ethical naturalism. The latter certainly come from a particular standpoint. Neo-Aristotelian ethical naturalists utilize a different perspective than a theological ethical naturalist such as Niebuhr. A philosophical or theological framework may provide the basis for determining what the virtues are, but the decision cannot be removed from nature. There needs to be a consonance with the natural sciences or it is not naturalism. Niebuhr and Thomas Aquinas both appeal to natural law as participating in divine law.

The second critique is also only problematic for reductive ethical naturalism. Sociobiologists would agree that humans have natural ends and that certain behaviors are the product of our evolutionary history. What is missing in that conversation is any concept of transcendence. Even an atheist such as Richard Dawkins, who generally sees life as determined at the genetic level, believes that humans have the capacity to transcend their nature.⁴³ Humans should strive to be better than the natural ends of propagating their genes into the next generation; he advocates for a liberal ethic.

Niebuhr's anthropology also addresses transcendence. Humans are self-transcendent, and through this they can be at least partially aware of God's desire for

⁴³ Richard Dawkins, *The Selfish Gene*, 30th ed. (Oxford: Oxford University Press, 2006), 201.

creation. They also have the freedom to act contrary to their nature, and this is also shaped in part by the capacity for self-transcendence. David McPherson sees ethical naturalism as providing a basis for concern for others out of the four naturalistic ends; it helps one survive and it can contribute to the well-being of the group.⁴⁴ Niebuhr and Thomas, however, see concern for others grounded in God's love for all of creation; by caring for what God cares for, people are honoring God and fulfilling what it means to be human. How it is determined what caring for others entails must include insights from nature, both human nature and nature as a whole. Nonreductive ethical naturalism has to contend with a variety of sources of knowledge.

Insights from the sciences and the science and religion dialogue are also crucial for an approach utilizing ethical naturalism because ethical naturalism requires input from the sciences. Lovin describes how a moral realism that uses ethical naturalism has to have coherence with other sources of knowledge:

If we get the facts wrong, we will be wrong about the ethics, too; for the reality to which moral realism refers is not a separate realm of moral ideas, independent of the facts. Moral realities *are* facts about the world, properties that we judge persons, actions, and situations to have precisely because they have identifiable factual characteristics that link up in appropriate ways with other sets of facts and possibilities.⁴⁵

From a moral realist perspective, this means that the concrete realities of the situation have to be examined, and if this examination is off, then any moral decision made from

⁴⁴ McPherson, "To What Extent Must We Go Beyond Neo-Aristotelian Ethical Naturalism?," 646.

⁴⁵ Lovin, *Reinhold Niebuhr and Christian Realism*, 106-107.

that examination will also be flawed. It also means, then, that moral statements can be reversible. If new information arises that challenges previous assumptions, the moral statement in question might be changed or abandoned depending on the nature of the new information. In the next section, I will briefly touch upon a form of realism that the science and religion field uses. For now it will suffice to say that what science says about a subject such as human nature, that science is not directly speaking about reality, though their observations are related to reality. Because of this, scientific knowledge can change as well. So if a nonreductive ethical naturalism looks to human nature to help specify moral norms, even the understanding of human nature needs to be open to the possibility of change.

Niebuhr's Christian realism is also theological realism. Justice is something to be pursued according to moral theories, but there is no guarantee that justice will be achieved morally or politically. There needs to be something else providing the motivation to pursue justice, and for Niebuhr, that is God. Love is inherent to God's nature and the ethic that Jesus provides is one of sacrificial love. Even though Niebuhr does not believe this is attainable in society, the demand of *agape* still serves as the standard and can provide the motivation needed to pursue justice, even if it will only ever be partially obtained.

Theological realism holds that "[s]tatements about God are not simply expressions of emotion or acts of personal commitment. Theological claims have cognitive content. They may be true or false. True statements about God are true because they accurately represent a reality independent of the concepts, theories, and evidence we

have pertaining to that reality.”⁴⁶ Truth, for the Christian realist, involves coherence of information from a variety of sources. In such a perspective, scripture helps the person reflecting ethically to identify sources in the text that are aligned with the message of hope and justice. Lovin argues that the “first task of ethical reflection is to establish the connections between human experience, social fact, and biblical symbol that make those judgments possible.”⁴⁷ Niebuhr’s analysis of sin and social groups in *Moral Man and Immoral Society* is an example of placing experience and social fact into conversation with scripture.

Theological assertions have to line up with other things known about the world. Even a prophetic version of Christianity, Niebuhr argues, must “insist on the organic relation between historic human existence and that which is both the ground and the fulfillment of this existence, the transcendent.”⁴⁸ This does not, however, reduce theology to science. Theology is influenced by science but the inverse is also possible.⁴⁹ In appealing to coherence, the argument is that “the beliefs which guide action are those by which we can coordinate all our knowledge and experience—religious awe, scientific observation, practical wisdom, and technical skill—in pursuit of those larger aims that give direction to our life as a whole and link us in shared purposes with others.”⁵⁰

Chapters two and three of this dissertation will address what coherence between Niebuhr’s anthropology and the sciences could entail.

⁴⁶ Ibid., 20.

⁴⁷ Ibid., 105.

⁴⁸ Niebuhr, *An Interpretation of Christian Ethics*, 105.

⁴⁹ Robert John Russell’s *Creative Mutual Interaction* serves as one example of theology having something to offer science. See *Cosmology: From Alpha to Omega* (2008) for a detailed analysis of his methodology.

⁵⁰ Robert J. Russell, *Cosmology: From Alpha to Omega, Theology and the Sciences* (Minneapolis: Fortress Press, 2008), 49.

The Science and Religion Dialogue and Critical Realism

The science and religion dialogue is a useful conversation partner for a Christian realist because the majority of scholars are also realists; the dominant philosophical approach in the field is that of critical realism. Ian Barbour, the pioneer of the field, examined similarities in method between religious studies and the sciences. Both methods use paradigms that can be revised or abandoned for new ones, and they utilize theories. Barbour identifies four criteria used to compare and judge scientific theories. First, a theory must fit the data, but this does not necessarily mean that the theory is correct. Second, there needs to be coherence within the theory in question and between this theory and other theories. The third criterion is scope, meaning that the more comprehensive a theory is, or if it has a general utility to a variety of fields, the more valid it is. Finally, the fertility of the theory is evaluated. It is not only whether a theory fits with the data and coheres with other related theories, but also whether the theory is useful in furthering the field, suggesting new avenues of inquiry and experimentation.⁵¹ Clearly coherence plays an important role in the sciences and in Christian realism, but the question Barbour raises is how people can be sure that there is coherence or truth when dealing with reality. Therefore, he applies the same criteria when evaluating truth claims.

Critical realism exists on a spectrum between classical realism on one end, and instrumentalism on the other. Classical realism holds that the models, paradigms, and theories that science uses are literal representations of reality. Instrumentalism argues that models, paradigms, and theories are just tools; they are useful in their predictive power

⁵¹ Ian G. Barbour, *Religion and Science: Historical and Contemporary Issues*, (San Francisco: Harper San Francisco, 1997), 109.

but they do not speak to the nature of reality.⁵² Critical realism posits a position somewhere between these two. Reality is not what is observed by scientists, but models, paradigms, and theories are more than useful tools, that they are related to reality itself. In other words, “scientific language does not provide a replica of nature but a symbolic system that is abstract and selective and deals with limited aspects of the situation for particular purposes.”⁵³ A critical realist position takes seriously the insights of science, but it does not reduce reality to scientific observation and theory. Philosophical and theological theories using a critical realist approach will need to fit the data and cohere with related theories, but they must also be fruitful in terms of spurring new insights and research. I believe that by bringing Niebuhr’s theological anthropology into conversation with insights from the sciences as well as the science and religion dialogue, that this modified anthropology promotes additional study in a variety of subjects, several of which will be explored in the final chapter.

Reinhold Niebuhr’s Theological Anthropology

Niebuhr’s Christian realism was influenced heavily by the time in which he lived. Europe felt the aftermath of World War I more immediately, but difficult times also came to America. Niebuhr’s views struck a chord with the disillusioned, which after the economic crash of 1929 was an ever-increasing proportion of the country. The growing economic crisis in America and Europe influenced the way Niebuhr saw the world and human nature. He looked to history and found some answers in Augustine, who also lived during a time of social upheaval. Niebuhr remained convinced that Christianity, in

⁵² Ibid., 117.

⁵³ Ian G. Barbour, *Issues in Science and Religion* (Englewood Cliffs NJ: Prentice Hall, 1966), 172.

particular Christian anthropology, provided a more adequate perspective on the human condition than other historical perspectives. This led to the creation of arguably his most famous work, the collection of Gifford Lectures known as *The Nature and Destiny of Man*.

In 1939 Reinhold Niebuhr was the invited speaker for the famous Gifford Lectures at Scotland's University of Edinburgh. According to Robin Lovin, what Niebuhr is attempting to do with the lectures that were published as *The Nature and Destiny of Man* is to compare "classical, Christian, and modern views of human nature, without any attempt to give the Christian view the special status of revealed truth, but with considerable confidence that he can demonstrate that the Christian view offers a more adequate assessment of both human possibilities and human evil than the alternatives."⁵⁴ In *The Nature and Destiny of Man* Reinhold Niebuhr presents an anthropology that captures the complexity of the human situation. He emphasizes the reality of sin while also calling for the rejection of an historical fall. All modern understandings of human nature, Niebuhr argued, are reformulations, or a recombination, etc. of the Greek and Hebraic understandings of human nature.⁵⁵ Christian views of human nature hold a unity between the body and soul, is oriented from God through the image of God, upholds individuality but also acknowledges that even as individuals, humans are not self-sufficient and requires relationships, primarily a relationship with God.⁵⁶

⁵⁴ Lovin, *Reinhold Niebuhr*, 13.

⁵⁵ Niebuhr, *The Nature and Destiny of Man*, 5.

⁵⁶ *Ibid.*, 12-16. Niebuhr fails to provide a succinct definition of human nature. Even in his discussion of classical, Christian, and modern views on human nature, he does not provide an all encompassing definition. In the explication of his anthropology, he is also inconsistent in the use of "nature" or "natural." The theological virtues are seen as the perfection of the spiritual aspect of human nature, but these are given by God, even for

Niebuhr has an essentialist view of human nature; that is to say, there is a common, universal nature that all humanity shares.⁵⁷ Human nature, for Niebuhr, has two aspects. The first is humanity's "natural endowments, and determinations," their "physical and social impulses," and their "sexual and racial differentiations," in short, everything that characterizes humans as creatures "embedded in the natural order."⁵⁸ The second aspect of human nature "includes the freedom of 'human spirit,' transcendence over natural process, and finally 'human' self-transcendence."⁵⁹ Both of these elements are important and contribute to Niebuhr's anthropology in mixed ways. Niebuhr argues there is a difference between essential nature "and the virtue of conformity to that nature."⁶⁰ This is a crucial distinction because it allows him to speak about the reality of sin but also keep sin outside of human essential nature. Niebuhr is famous for saying that sin is inevitable but not necessary.⁶¹

The perfection of human nature would mean always acting according to human nature. This perfection is expressed differently in the two aspects of human nature. For the first, creaturely part, adherence to natural law results in perfection. Natural law, for Niebuhr, "is the law which defines the proper performance of 'human' functions, the normal harmony of 'human' impulses, and the social relation between 'individuals'

Niebuhr. Further work will be needed outside this dissertation in order to clarify the ways in which Niebuhr describes "nature" and "natural."

⁵⁷ For the sake of simplicity, I will not be entering into the larger conversation about the definition of species. Humans, for this argument, will be limited to the modern species *Homo sapiens*.

⁵⁸ Niebuhr, *The Nature and Destiny of Man*, 270.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid., 242.

within the limitations of the natural order.”⁶² The perfection of the second, transcendent part is the achievement of the theological virtues: love, hope, and faith.⁶³

When Niebuhr expands on his interpretation of the theological virtues, it becomes clear to me that he is not actually referring to the ethical method of natural law when he speaks of it as the perfection of the first part of human nature. Instead, I see it as a virtue-based ethic. The perfection of the first part of human nature could be defined as virtue ethics defines human flourishing. Such flourishing is not divorced from the theological virtues; indeed, it is influenced by them. When Niebuhr speaks of the harmony of impulses and social relation, he is pointing to three things in particular:

- (a) The perfect relation of the soul to God in which obedience is transcended by love, trust and confidence (“Thou shalt love the Lord thy God”);
- (b) the perfect internal harmony of the soul with itself in all of its desires and impulses: “With all thy heart and all thy soul and all thy mind”; and
- (c) the perfect harmony of life with life: “Thou shalt love thy neighbor as thyself.”⁶⁴

Humans, however, are not perfect. Humans act in ways that disrupt the kinds of harmonies Niebuhr discusses.

Niebuhr’s solution to this problem is twofold. The first is that he acknowledges that it is human nature itself that allows for the capacity to sin. Humanity’s self-transcendence provides the opportunity for humans to see beyond their own lives, to see themselves as both subject and object, and to see others as selves like them. It also illuminates finitude, both of the world and of the individual. Humans are created animals,

⁶² Ibid., 270.

⁶³ Ibid., 271.

⁶⁴ Ibid., 288-289.

and like all other animals, are subject to contingency. The difference is that self-transcendent organisms are aware of the finite and contingent nature of reality. Niebuhr argues that humans, aware of the contingent nature of life, seek ways to mitigate or overcome these contingencies, and in so doing, “all human life is involved in the sin of seeking security at the expense of other life.”⁶⁵ The precursor to sin, for Niebuhr, is anxiety. Humans are aware of the tenuous nature of their existence, and this leads them to act in ways to alleviate the anxiety.

Anxiety itself is not sin, for Niebuhr believes that it is possible for anxiety to be a creative, productive force in human life. The dual nature of anxiety is important because Niebuhr uses this kind of argument in other aspects of his anthropology, which I will discuss later. Humans are anxious because the world has limits and humans have limits, but simply knowing that is the case does not define what those limits are. Niebuhr argues that humans “can do nothing and regard it perfectly done, because higher possibilities are revealed in each achievement. All human actions stand under seemingly limitless possibilities”⁶⁶ is just as applicable now as it was when he was alive. The seemingly limitless possibilities of human actions are exacerbated in the discussion of sin. The problem is that too often humans deny their finitude and believe that they are capable of completely overcoming the cause of their anxiety on their own. This is why, like Augustine before him, Niebuhr identifies pride as the primary form of sin.

Drawing from scripture, Niebuhr identifies two dimensions of human sin: religious and moral/social. The religious aspect concerns human action regarding God. Humans rebel against God. As previously stated, humans believe they can transcend any

⁶⁵ Ibid., 182.

⁶⁶ Ibid., 183.

finitude, and when they seek to do this on their own they are trying to “usurp the place of God,” according to Niebuhr.⁶⁷ The other dimension of sin, the moral/social, involves humans’ interactions with each other and the rest of creation and is characterized by injustice. The anxiety humans feel from their finitude can seem more immediate and real than the finitude they can recognize in others. Therefore, the “ego which falsely makes itself the centre of existence in its pride and will-to-power inevitably subordinates other life to its will and thus does injustice to other life.”⁶⁸

In trying to determine the origin of sin—both of its dimensions—Niebuhr looks to the account of the fall in scripture. While ultimately not an excuse for human action, Niebuhr points to the notion of temptation and how it relates to human freedom and finitude. Humans had the freedom to rebel against the limits that God gave them, but temptation only existed because of a false interpretation of the situation.⁶⁹ Niebuhr believes that sin cannot be reduced to any one aspect of human nature or behavior, though they can contribute. Humans can overestimate their capacities, but this in and of itself is not sin. Self-transcendence allows humans to know that they are limited, even if they overestimate what they can do. Thus, anxiety is not sin, but it is part of temptation. Even the creative/productive aspect of anxiety cannot be separated from the tendency to sin.

Even though Niebuhr asserts the universal nature of sin, he argues that there is a biblical distinction between sin and guilt. Niebuhr upholds Romans chapter three and the assertion that all humans sin, but thinks it is possible for people who are equal in sin to be

⁶⁷ Ibid., 179.

⁶⁸ Ibid.

⁶⁹ Ibid., 180.

unequal in guilt. The most obvious place where there is inequality in guilt is where there is a difference in power. Niebuhr says that those “who hold great economic and political power are more guilty of pride against God and of injustice against the weak than those who lack power and prestige.”⁷⁰ Part of the increase in guilt comes from inordinate self-assertion between individuals, but the power differential also means that a person is more likely to assert his or her power over more than one person. This makes the problem of sin more complex, and Niebuhr gives additional attention to this problem in his earlier book, *Moral Man and Immoral Society*.

The problem of sin is compounded because it does not exist on the level of individual interactions alone. In the introduction of *Moral Man and Immoral Society*, Niebuhr states, “a sharp distinction must be drawn between the moral and social behavior of individuals and of social groups, national, racial, and economic; and that this distinction justifies and necessitates political policies which a purely individualistic ethic must always find embarrassing.”⁷¹ Niebuhr sees his understanding of group behavior as an extension of his understanding of human nature and individual behavior. While humans are social and able to think of the needs of other people, acting in ways that take others’ needs as seriously as their own can be difficult. It is easiest to see people acting for the benefits of others in the family context. This is where humans learn and practice social skills. Families get larger, or a person’s network of relationships increases.

Niebuhr believes that people can learn to extend the care they give for others beyond the family or close relationships, but at the same time he argues, “there are definite limits on the capacity of ordinary mortals which makes it impossible for them to

⁷⁰ Ibid., 225.

⁷¹ Niebuhr, *Moral Man and Immoral Society*, xxv.

grant to others what they claim for themselves.”⁷² These, according to Niebuhr, are “limitations of the human mind and imagination, the inability of human beings to transcend their own interests sufficiently to envisage the interests of ‘others’ as clearly as they do their own makes force an inevitable part of the process of social cohesion.”⁷³ These limits require societies to set up rules for how people should treat one another. Again, it is easier for smaller groups of people who are closely connected to come to agreement on conduct than it is for larger groups or people who are not closely connected. The problem is complicated because “individual limitations have a cumulative effect in human societies, and the moral attitudes, which tend to diminish them, are decreasingly adequate, when they are directed toward” groups “and not individuals.”⁷⁴ So not only does society have to deal with the effects of individual humans’ limitations and failings, but the strategies used to help individuals apply reason and imagination in an effort to look to the concerns of others are not as useful when applied to groups.

Niebuhr argues that the obligations people identify regarding what they owe God are viewed in personal terms, and that interactions between individuals foster a stronger sense of moral obligation. Groups of people, on the other hand, do not have individual interactions, and so the outcome or goal of a group’s behavior turns out to be different. When people think of their obligations as individuals to others, they “believe they ought to love and serve each other and establish justice between each other. As racial, economic and national groups they take for themselves, whatever their power can command.”⁷⁵ Therefore, Niebuhr asserts, “[a]ll social co-operation on a larger scale than the most

⁷² Ibid., 3.

⁷³ Ibid., 6.

⁷⁴ Ibid., 25.

⁷⁵ Ibid., 9.

intimate social group requires a measure of coercion. While no state can maintain its unity purely by coercion, neither can it preserve itself without coercion.”⁷⁶

The most common forms of coercion are economic and military. An example of economic coercion that relates directly to the weakening of obligations in society is, according to Christine Firer Hinze, a government legislating to “counteract both individual and group selfishness; Niebuhr mentions taxation and social security systems that compel citizens to serve their neighbors more than they otherwise would.”⁷⁷ People are not concerned enough with the needs of others in society that they must be compelled to give more than they would have given of their own volition. In fact, Niebuhr goes on to say that philanthropy is not as meaningful as a “high form of justice” because justice recognizes that the claims that others make on people are real, whereas philanthropic action does not necessarily require people to examine their place in society.⁷⁸

This is what Niebuhr means by an individual ethic being embarrassed of a political policy. A religious individual ethic that places love as the highest virtue “insists that the needs of the neighbor shall be met, without a careful computation of relative needs,” whereas a rational ethic “seeks to bring the needs of others into equal consideration with those of self.”⁷⁹ People know that they should, out of love, provide for the needs of others, but on a societal level this is not happening. While acting out of love would look only to the concerns of the person in need, this is not practical as the social

⁷⁶ Ibid., 3.

⁷⁷ Christine Firer Hinze, “The Drama of Social Sin and the (Im)possibility of Solidarity: Reinhold Niebuhr and Modern Catholic Social Teaching”, *Studies in Christian Ethics* 22, no. 4 (2009): 453.

⁷⁸ Reinhold Niebuhr, *Love and Justice: Selections from the Shorter Writings of Reinhold Niebuhr*, ed. D. B. Robertson (Louisville, KY: Westminster John Knox Press, 1992), 26.

⁷⁹ Niebuhr, *Moral Man and Immoral Society*, 57.

norm because people might bankrupt themselves tending to the needs of others, in turn needing help themselves. The individual ideal of love of caring for the needs of the neighbor cannot be achieved in society, and so the best that can be hoped for is an approximation of justice through coercion.

Richard Crouter concisely captures Niebuhr's analysis in *Moral Man and Immoral Society* when he says that for Niebuhr, "human pride—excessive self-preoccupation resulting in moral blindness—is empirical, rooted in the facts of experience. His signature insight holds that the morality of groups (especially of nations) is even less virtuous than that of individuals. His reasoning about this is straight forward: Conscience works less well collectively. Compared to individuals, a group is less free to self-correct its morality."⁸⁰ As stated above, this is because "[i]n every human group there is less reason to guide and to check impulses, less capacity for self-transcendence, less ability to comprehend the needs of others and therefore more unrestrained egoism than the individuals, who compose the group, reveal in their personal relationships."⁸¹ When reflecting on why this must be the case, Niebuhr comes to the conclusion that there is not a social force that is as rational as individuals are "powerful enough to cope with the natural impulses by which society achieves its cohesion."⁸² Earlier, I quoted Niebuhr as saying that human limitations have a cumulative effect in society, but he goes a step further and says that group egotism is not simply the sum of the egotism of the individuals in the group; it is actually greater than that.⁸³

⁸⁰ Crouter, *Reinhold Niebuhr On Politics, Religion, and Christian Faith*, 15.

⁸¹ Niebuhr, *Moral Man and Immoral Society*, xxv.

⁸² *Ibid.*

⁸³ *Ibid.*

Niebuhr believes that the nation is the clearest example of a bound society because membership can be identified and it has a government. Nations are separated from one another, and this makes them selfish. Nations lack the kind of personal interaction that is so vital to individual morality. In fact, Niebuhr argues, “both sympathy and justice depend to a large degree upon the perception of need,” and that nations are unable to truly perceive the needs of other nations.⁸⁴ Even in his time, Niebuhr saw that advances in communications help people of different nations become more aware of what is going on in other parts of the world; he believed, “there is nevertheless little hope of arriving at a perceptible increase of international morality through the growth of intelligence and the perfection of means of communication.”⁸⁵ And with the advent of even further advances in communications since Niebuhr’s death, I reluctantly agree with him that even though people are more aware of the needs of others, I do not think there has been a great increase in international morality. A very specific example of the way in which group egotism is greater than the sum of individual egotism is what Niebuhr identifies as the paradox of patriotism. Niebuhr argues that patriotism “transmutes individual unselfishness into national egoism. Loyalty to the nation is a high form of altruism when compared with lesser loyalties and more parochial interests ... and expresses itself, on occasion, with such fervor that the critical attitude of the individual toward the nation and its enterprises is almost completely destroyed.”⁸⁶ Performing an action for the good of the nation is seen as more valuable and upstanding than other things, but being critical of the people in power or questioning policy is seen as a

⁸⁴ Ibid., 85.

⁸⁵ Ibid.

⁸⁶ Ibid., 91.

dangerous act. For example, Americans are often chastised for criticizing the President of the United States because to do so is “un-American,” especially when the nation is at war.

Christine Firer Hinze argues that Niebuhr offers a glimpse into the depth of sin: “[m]ore consistently than Catholic thought, Niebuhr tracks the way sinful self-interest clouds awareness of structural sin, confounds efforts to understand it, and removes motivation to combat it.”⁸⁷ Niebuhr also looks within a nation to examine classes and how they interact. Classes are more difficult to define than nation, Niebuhr says, because “classes may be formed on the basis of common functions in society, but they do not become sharply distinguished until function is translated into privilege.”⁸⁸ And often the people who are privileged are able to convince themselves of things, most notably, that their interests are the interests of the entire society, or at least that their interests are closely aligned with those of the whole.

When it comes to identifying why there are differences of privilege between people in different classes, Niebuhr asserts, “too great a significance is attached to inequality of faculty as the basis of inequality of privilege. Differences in faculty and function do indeed help to originate inequality of privilege, but they never justify the degree of inequality created, and they are frequently not even relevant to the type of inequality perpetuated in a social system.”⁸⁹ This problem is compounded by education as well. Privilege can lead to better education, and education can bring about other opportunities to learn or use skills. It could be easy for someone to look at an individual

⁸⁷ Hinze “The Drama of Social Sin and the (Im)possibility of Solidarity: Reinhold Niebuhr and Modern Catholic Social Teaching”, 457.

⁸⁸ Niebuhr, *Moral Man and Immoral Society*, 113.

⁸⁹ *Ibid.*, 114.

who had these additional opportunities through privilege and say that it was her or his own gifts and abilities and not privilege that led to their success.⁹⁰ And whether someone views success as innate ability or privilege is also shaped by class. According to Niebuhr, “[w]hatever may be the degree of the self-consciousness of classes, the social and ethical outlook of members of given classes is invariably colored, if not determined, by the unique economic circumstances which each class has as a common possession.”⁹¹ In other words, in addition to the limitations that every individual possesses through human nature, society can also play a role in shaping how they view themselves and others.

Sin as Pride⁹²

Continuing to build on scripture, Niebuhr asserts a tradition, particularly in the Augustinian perspective, of understanding the primary form of sin as pride and the secondary form as sensuality.⁹³ Niebuhr identifies three kinds of pride, but admits that these are categories or “ideal types” that are never really separable. They are the “pride of power, pride of knowledge, and pride of virtue.”⁹⁴ The pride of power refers to both the desire for power, if that desire is motivated by the goal of ego or pride, as well as pride found in achieving and exercising power. Niebuhr argues, “[t]here is a pride of power in which the human ego assumes its self-sufficiency and self-mastery and imagines itself secure against all vicissitudes. It does not recognize the contingent and dependent

⁹⁰ Ibid., 118.

⁹¹ Ibid., 116.

⁹² Parts of this section appear in an article published this year. Braden Molhoek, “Sensuality and Altering Anthropology in Artificial Intelligence and Transhumanism,” *Theology and Science* 14, no. 1 (February 2016): 99-104.

⁹³ Niebuhr, *The Nature and Destiny of Man*, 186.

⁹⁴ Ibid., 188.

character of life and believes itself to be the author of its own existence, the judge of its own values, and master of its own destiny.”⁹⁵

The second kind of pride, pride of knowledge, often is accompanied by pride of power, but is more focused on the intellect, mind, and reason. It involves an attempt to obscure the finitude of humans, especially of what humans are capable of knowing. Niebuhr asserts that all human knowledge is finite; everyone speaks from a particular situation, and their perspective is neither completely objective nor absolute. The pride of knowledge, however, is acting, believing, or even pretending, in Niebuhr’s words, “to be final and ultimate knowledge.”⁹⁶ Niebuhr uses the verb “pretend” often in this discussion because for him, humans are always acting, whether they know it or not, in order to hide or minimize one’s biased perspective.⁹⁷ This kind of pride is highlighted by the tendency of people to identify it in other people’s thought but to fail to find it in one’s own work. That is, humans can be quick to point out that someone else’s work is based on a particular perspective or experience, but still maintain that their own perspective is free of it.

The third kind of pride, pride of virtue, is an extension of intellectual pride into the moral sphere. It is not just that one’s ideas are absolute truth; it is also the judgment of others for failing to live up to one’s standard, in other words, self-righteousness. Niebuhr takes this kind of pride further and says that it actually leads to a fourth kind, spiritual pride. This kind of pride adds value and judgment to reason, and when one’s

⁹⁵ Ibid.

⁹⁶ Ibid., 194.

⁹⁷ Niebuhr also states that this is true of those who rely on science, choosing to ignore or failing to see the limits that perspective brings as well. This reminder must remain throughout this dissertation because in bringing science into the discussion, it cannot not be given a final or ultimate perspective.

standards are universalized or taken to be God's standards, there is no longer simple disagreement, but there is good and evil.⁹⁸ It is the content of Jesus' clash with the Pharisees and the discussions during the Reformation.

Pride is often, though not always, the kind of sin that people who have power tend toward. Humans value things, but also realize that the things they value are part of a contingent world, subject to the whim of other people and random circumstance. Because humans are aware of this, they are also able to anticipate potential threats to their security, or the security of what they value, and act in ways to protect from these threats. Pride, in this case, is a person believing that the proper threats have been identified and believing that only their assessment of the situation and their solution is the proper action or response. This cycle does not end, because it is always possible to identify or even imagine new threats. Pride, therefore, is most often "sin as inordinate self-assertion."⁹⁹

Sin as Sensuality¹⁰⁰

Pride, however, is not the only way that humans can try to deal with anxiety. He also identified sensuality as another form of sin. Sensuality can refer to matters of sexual ethics, and while Niebuhr would likely classify many sexual sins as a part of sensuality, he actually is arguing a different point. Whereas pride is an attempt to control what is beyond control, sensuality is being caught up in the things that can be controlled. It is about avoiding the anxiety that comes from the contingent aspects of life, and focusing, more often than not, on pleasures "such as possessions, food, drink, or TV, and also by

⁹⁸ Ibid, 199.

⁹⁹ Douglas Ottati, "The Niebuhrian Legacy and the Idea of Responsibility", *Studies in Christian Ethics* 20, no. 4 (2009): 412.

¹⁰⁰ Parts of this section appear in Molhoek, "Sensuality and Altering Anthropology in Artificial Intelligence and Transhumanism," 99-104.

withdrawing from activities in a threatening world. We attempt to insulate ourselves and perhaps grow numb. Now the problem is not inordinate self-assertion but rather deficient participation in our many relationships and responsibilities.”¹⁰¹

It is tempting to say that since pride is often used by people who have power, sensuality must be the way in which people without power engage their anxiety, but this is an incorrect conclusion. People who have power also employ sensuality due to fear and anxiety. Sometimes it is because people are not sure they can live up to expectations. In other words, people who lack not ability, but confidence “also commit the sin of sloth and laziness where we take refuge in immediate distractions and sensual pleasures to avoid reaching for higher goals or ideals.”¹⁰² People may also be unsure whether they are pursuing the best course of action in a particular situation. Arguing against American isolationism in World War II, Niebuhr believed that to not take part in the struggle against Hitler was “an attempt to avoid the risks and the anxieties of action by renouncing the responsibilities of power.”¹⁰³ This position is clearly a part of Niebuhr’s realism. Being unsure, afraid, anxious, or any other number of hesitations is not a sufficient reason for not acting, and it does nothing to lessen culpability.

Critiquing Niebuhr

Feminist Challenges

Niebuhr’s take on sin is not without its critics. Because it is based on Augustine’s interpretation of sin, the same kinds of criticisms people have about Augustine can be

¹⁰¹ Douglas Ottati, “The Niebuhrian Legacy and the Idea of Responsibility,” 413.

¹⁰² Crouter, *Reinhold Niebuhr On Politics, Religion, and Christian Faith*, 46.

¹⁰³ Ottati, “The Niebuhrian Legacy and the Idea of Responsibility,” 413.

made about Niebuhr. Yet his anthropology, though shaped by Augustine, is different enough that new criticisms occur as well, especially from feminist scholars. Judith Plaskow, in her book *Sex, Sin and Grace: Women's Experience and the Theologies of Reinhold Niebuhr and Paul Tillich*, presents several arguments against Niebuhr's understanding of sin. Her major criticism is that Niebuhr defines sin and grace in a way that does not take women's experience into account, and actually continues to reinforce oppressive behavior toward women. "theology, insofar as it focuses on the sin of pride, not only neglects women's experience, but adds to the pressures that keep women from being 'women and persons' by suggesting that self-assertion and the struggle for self-definition are sins," she argues. Though her critique is not limited to Niebuhr, her position is especially relevant for his understanding of sin.¹⁰⁴ Plaskow contends that not only does Niebuhr privilege pride as sin, but the other major kind of sin he identifies, sensuality, he grounds in pride.

Niebuhr offers two definitions of sensuality, but chooses to work with the narrower one in order to show how it comes out of pride. The first definition identifies sensuality as not the search to minimize human finitude, but by hiding freedom, getting caught up in "some aspect of the world's vitalities."¹⁰⁵ Niebuhr goes on to say, "Sensuality is never the mere expression of natural impulse," rather it "always betrays some aspect of 'human' abortive effort to solve the problem of finiteness and freedom. Human passions are always characterized by unlimited and demonic potencies of which

¹⁰⁴ Judith Plaskow, *Sex, Sin, and Grace: Women's Experience and the Theologies of Reinhold Niebuhr and Paul Tillich* (Washington: University Press of America, 1980), 68.

¹⁰⁵ Niebuhr, *The Nature and Destiny of Man*, 179.

animal life is innocent.”¹⁰⁶ Later in the very same chapter Niebuhr defines sensuality as the “effort to escape from the freedom and the infinite possibilities of spirit by becoming lost in the detailed processes, activities, and interests of existence, an effort which results in unlimited devotion to limited values.”¹⁰⁷ This second definition is much broader than the first, Plaskow argues. This definition includes the kinds of things historically associated with sensuality, such as sexual sin and intemperance in food and drink, but it also applies to many other things, including “the bureaucrat whose existence and value is defined by the manipulation of certain tasks from nine to five daily” and “the woman who lives for and through the everyday running of her household.”¹⁰⁸ When Niebuhr turns to examining the nature of sensuality, and whether it is grounded in pride or distinct, he uses the first definition.

Niebuhr’s choice of the more narrow definition of sensuality is supported by biblical religion and much of Christian theology. Paul plays a large role in Niebuhr’s interpretation of biblical religion and Christian theology, so Romans chapter one plays a significant role in the discussion of sensuality. It is in this chapter that “lust, particularly unnatural lust, is described as a consequence of and punishment for the more basic sin of pride and self-deification.”¹⁰⁹ The behaviors and dispositions associated with sensuality are seen as a result or a consequence of humanity’s prideful action against God. Likewise, Niebuhr sees the same argument in Augustine’s understanding of “the passions of the flesh and however morbidly he may use sex as the primary symbol of such passions, his analyses always remain within terms of this general statement. He never

¹⁰⁶ Ibid.

¹⁰⁷ Ibid., 185.

¹⁰⁸ Plaskow, *Sex, Sin, and Grace*, 60.

¹⁰⁹ Niebuhr, *The Nature and Destiny of Man*, 230.

regards sensuality as a natural fruit of 'humanity's' animal nature."¹¹⁰ Aquinas and Luther also support this view in Niebuhr's opinion.

Plaskow is discouraged by Niebuhr's insistence in following with tradition because she argues, "Niebuhr does not hesitate to oppose tradition, even where its consensus on a particular doctrine is a good deal stronger, if he feels tradition is opposed to good sense."¹¹¹ Niebuhr follows tradition further and focuses much of his discussion of sensuality on sexual passion. Humans, according to Niebuhr, have lost the true center of life, God, and the result is that "sex is the most obvious occasion for the expression of sensuality and the most vivid expression of it. Thus sex reveals sensuality to be first another and final form of self-love, secondly an effort to escape self-love by the deification of another and finally as an escape from the futilities of both forms of idolatry by a plunge into unconsciousness."¹¹² Plaskow, using an internal critique of Niebuhr's system, that taking the narrow definition of sensuality is problematic for Niebuhr's anthropology because human "essence is self-determination. Human sin is the wrong use of" this "freedom and its consequent destruction."¹¹³ In other words, people can abuse their freedom by exalting it, or they can give it up.¹¹⁴ Niebuhr's discussion of sensuality, however, eliminates the latter as an option, since sensuality comes out of pride.

The other problem with focusing on sin as pride has been touched upon briefly already; sin as pride only fails to take into account the experience of women and actually can lead to further oppression. Plaskow argues:

¹¹⁰ *Ibid.*, 231.

¹¹¹ Plaskow, *Sex, Sin, and Grace*, 62.

¹¹² Niebuhr, *The Nature and Destiny of Man*, 239.

¹¹³ *Ibid.*, 16.

¹¹⁴ Plaskow, *Sex, Sin, and Grace*, 63.

insofar as Niebuhr does insist on the primacy of pride, his doctrine of sin fails to take account of women's experience. The problem is not simply that Niebuhr subordinates sensuality to pride. The flaw in his doctrine of sin lies in the fact that, in subordinating sensuality, he loses sight of it as a significant human sin and one independent of pridefulness. He focuses only on those aspects of sensuality which do seem to follow from pride, entirely neglecting important dimensions of the human flight from freedom. He is thus unable to speak to or evaluate those patterns of human behavior which are particularly characteristic of women.¹¹⁵

Sensuality is being portrayed as women's sin, but Plaskow is careful to say that this is not because women are more likely than men by their nature to succumb to sensuality, but using Niebuhr's broader definition of sensuality, women have been raised from birth toward particular function and "to see these functions as expressing their true female nature. It would not be surprising, therefore, if the particular sin of women were the adopting of society's view of themselves to the detriment of their freedom. It would not be surprising, in other words, if sensuality and not pride were the primary female sin."¹¹⁶ Plaskow's internal critique of Niebuhr's anthropology in the previous paragraph shows that his understanding of human nature can make room for sensuality as a form of sin not grounded in pride, but she believes that ultimately his doctrine of sin cannot.

Jesse Couenhoven presents a thesis that the critique of Augustine as seeing all sin as pride might have actually started from the critique of Niebuhr's doctrine of sin, and that Augustine's view changed over time, allowing for other forms of sin. Judith Plaskow's critiques are grounded in Valerie Saiving's 1960 work that states, "that the

¹¹⁵ Ibid.

¹¹⁶ Ibid., 64.

traditional view of sin and salvation depends on an anthropology that is blind to female experience.”¹¹⁷ As I stated in my analysis of Niebuhr’s understanding of sensuality, Couenhoven argues, “Niebuhr’s definition of sensuality, as the escape from freedom, is compatible with his feminist critics’ understanding of sloth.”¹¹⁸ Niebuhr’s choice to use the narrower definition of sensuality is a problem, but his broader definition is not incompatible with feminist insights. The criticism of Niebuhr is applied to Augustine as well, but Couenhoven contends that Augustine’s later writings, from his debates with the Pelagians, actually “show that, at least for a time, Augustine held that not all sin involves pride.”¹¹⁹ All sin may have begun in pride; that is to say, pride is what caused the fall, but the sins that followed after this do not have to be pride, and other forms of sin can exist.¹²⁰ It may be that “the beginning of sin is pride, but pride is not the continual form or source of all other sin. Pride, then, is not the basic sin. And while Augustine believes that scripture clearly teaches about the beginning of sin, he does not indicate that scripture makes it clear what the basic sin is – or indeed, if there even is one.”¹²¹ Couenhoven’s reading of Augustine suggests that Augustine had changed his opinion away from pride being the basic sin in 415.¹²² Other forms of sin that Augustine discusses include ignorance and “carnal concupiscence,” which has both a narrow definition and a broad one along the lines of sensuality for Niebuhr.¹²³

¹¹⁷ Jesse Couenhoven “Not Every Wrong Is Done with Pride: Augustines Proto-Feminist Anti-Pelagianism.”, *Scottish Journal of Theology* 61, no. 1 (January 2008): 33.

¹¹⁸ *Ibid.*, 35.

¹¹⁹ *Ibid.*, 36.

¹²⁰ *Ibid.*, 37.

¹²¹ *Ibid.*, 38.

¹²² *Ibid.*, 41.

¹²³ *Ibid.*, 45.

I am unsure whether Couenhoven's distinction between pride being the beginning of sin in general, but not grounding future sins, is truly convincing. It seems to me that even if the basic sin is not pride, that the introduction of sin into the world through pride still makes other forms of sin, such as sensuality, as derived from pride. Nevertheless, I still believe it is possible to incorporate the insights of feminist thought into Niebuhr's doctrine of sin. In my estimation, his doctrine of sin is ultimately grounded in his anthropology, and if his anthropology can accommodate her critique, a point which Plaskow concedes, I believe his understanding of sin can as well.

The critiques Plaskow has raised thus far have focused on what she sees as the most relevant aspects of Niebuhr's work to women's experience, but they are not the only critiques. A more minor critique, but one that is still relevant to women's experience, involves Niebuhr's focus on the negative aspects of creatureliness. The creaturely aspect of human nature is not evil, but Plaskow argues that human finitude "is definitely an unpleasant fact for Niebuhr, one which sets boundaries to human freedom but does not endow it with any positive content."¹²⁴ There are positive elements to the creaturely aspect of human nature, and failing to recognize these elements "may prevent him from fully apprehending sensuality's temptations. Not seeing human beings as continually, positively involved in the world's vitalities, he is less likely to view loss of self in some aspect of these vitalities as a clear and ever present danger."¹²⁵ And on the other hand, failure to recognize the positive elements of the creaturely aspect of human nature could also "keep him from seeing the ways in which creatureliness, differently understood, can

¹²⁴ Plaskow, *Sex, Sin, and Grace*, 69.

¹²⁵ *Ibid.*

curb and discourage human destructiveness.”¹²⁶ If all finitude does is mark the limits of human freedom, then these limits are seen as something to be overcome, regardless of the cost. This kind of thinking can lead to destructive behavior, for humanity’s relationship with God, with the rest of creation, and with each other.

Plaskow contends that understanding the positive connections between the creaturely aspect of human nature and human freedom and creativity could lead to ways of interacting with the world that are less destructive. Women’s experience is needed for this. Historically, women have been viewed as closer to nature than men, largely due to cultural interpretations of biology. Like other mammalian species, human women give birth and provide milk to their offspring, and this has linked women and children together; in social roles it has associated women with domestic duties rather than work in the public sphere.¹²⁷ So even though this association in women’s experience between women and nature has been problematic, it also means that women “have necessarily developed a more positive contentful sense of human creatureliness than Niebuhr (men?) and a greater sense of connection with natural processes and needs. If this is so, then women’s experience may again provide a corrective to an understanding of human nature which is otherwise onesided.”¹²⁸ Specifically, Plaskow looks to the experiences of pregnancy and child rearing for examples of women’s connection to the positive aspects of human creatureliness. Pregnancy is a clear example of the creaturely aspect of human nature, and it provides limitations, but the whole of the experience cannot be reduced to limitations. Pregnancy and child rearing are also concrete examples of human

¹²⁶ Ibid., 70.

¹²⁷ Ibid., 13.

¹²⁸ Ibid., 71.

dependence, but also growth.¹²⁹ There is absolutely room in Niebuhr's anthropology to examine the positive elements of the creaturely aspect of human nature.

Rethinking the Critiques

Since the publication of Plaskow's book there has been a large increase in volume and diversity of feminist work, some of which is also critical of the kinds of arguments made by Plaskow and Saiving. Some scholars argue that what was understood as women's experience did not include the experience of women of color, women of other faiths, or non-heterosexual women, and that generic appeals to women's experience could hide voices as much as male dominated perspectives of human nature did. Additionally, what constitutes women's experience was also shaped by a particular understanding of gender, a binary of either male or female, which many scholars no longer support.¹³⁰ Other scholars argue along similar lines to Couenhoven, that Plaskow was not completely correct in her analysis of Niebuhr's doctrine of sin. Identifying women's sin primarily as sensuality and men's sin primarily as pride is not accurate, and perhaps Niebuhr did not emphasize the primacy of pride as much as Plaskow contended.¹³¹

Other scholars support the insights of Saiving and Plaskow, but argue that pride is the primary form of sin. "the pervasive sinfulness of the human person mitigates the ability to judge theology's fit with experience. Our sinfulness can cause us to intentionally misread our experiences. Sin involves not only doing what is wrong but also

¹²⁹ Ibid., 71-72.

¹³⁰ Rebekah Miles, "Valerie Saiving Reconsidered", *Journal of Feminist Studies of Religion* 28, no. 1 (Spring 2012): 80-82.

¹³¹ Stone, Ronald H. "Reinhold Niebuhr and the Feminist Critique of Universal Sin." *Journal of Feminist Studies of Religion* 28, no. 1 (Spring 2012): 92-93.

going to great lengths to convince others, and even ourselves, that what we are doing is legitimate.”¹³² In other words, experience, or people’s interpretation of their experience, can be suspect at times, and what is believed to be a motivation is not always in fact the true or only motivation. Jodie Lyon, in reflecting on her own behavior, states that even though an outside observer would identify her behavior as sensuality, that ultimately a “stubborn willfulness underlay the most seemingly passive acts of losing [herself]. A prideful refusal to attend to the development of [her] own gifts and talents lurked behind a self-sacrificial façade.”¹³³ Pride can have different expressions; but acting on one’s own wishes and desires in opposition to what God wills for humans is still pride or self-assertion, whether it leads to a failure to take responsibility, or attempting to usurp God’s power. And in such a context, self-sacrifice entails people turning away from their own sinful desires and toward what God desires.¹³⁴

These positions are being included not to discredit the insights that Plaskow and others bring, but to show that there is always work to be done, that humanity’s understanding of human nature can change over time. And if it is the case that over time, understandings of human nature can change, then insights need to be incorporated, even if that means the paradigm must be replaced. As many of the voices in this conversation have said, these critiques are not incompatible with Niebuhr’s anthropology, and so I do not believe that the paradigm of his anthropology needs to be replaced. Instead, this dissertation will try to incorporate insights into Niebuhr’s existing framework and identify what the implications of the resulting changes are.

¹³² Jodie L. Lyon, “Pride and the Symptoms of Sin”, *Journal of Feminist Studies of Religion* 28, no. 1 (Spring 2012): 100.

¹³³ *Ibid.*

¹³⁴ *Ibid.*, 101-102.

While this dissertation is not a feminist revision of Niebuhr's anthropology, there is an overlap in interests and the possibility of lending support to the critiques of Plaskow and others. As I stated earlier, I believe that Niebuhr's account of sin can accommodate sensuality not being derived from pride. This is because I am interpreting Niebuhr's anthropology in a virtue framework, and doing so allows for a way to understand sensuality as separate from pride. As I have recounted, the perfection of human nature for Niebuhr has two aspects that correspond with the two aspects of human nature. The perfection of the spirit/freedom aspect of human nature is the theological virtue, and the perfection of the creaturely aspect of human nature is harmony between God and self, within the self, and between self and the rest of creation—that is to say, human flourishing. This is important because in the very core of human perfection is harmony within the self, or an ordered soul. In other words, human flourishing cannot involve a complete lack of self, so there needs to be a strong concern regarding not only inordinate self-assertion, but also the abnegation of self. Self-assertion itself could be viewed as a virtue, and virtues are the mean between an excess and a deficiency. In this case, the excess would be pride and the deficiency would be sensuality. All individuals are born with dispositions (part of their creaturely nature) and this makes the mean different for different people. In other words, some people would be more likely to err toward pride while others would be more likely to err toward sensuality, and what is properly self-assertive for one person is not necessarily properly self-assertive for another person.

I also agree with Plaskow's critique that Niebuhr focuses too much on the negative aspects of the creaturely part of human nature. Chapter two of this dissertation will look to Niebuhr's treatment of original sin and bring in voices from the field of

theology and science to examine the consonance between original sin and human biological history. However, the following chapter will also look at the positive elements of the creaturely aspect of human nature, with an attempt to determine whether there is consonance between Niebuhr's understanding of original righteousness and human biological history. Human perfection is impossible without grace, but I argue there are components of this perfection that are shaped by prosocial behavior that is not limited to infused virtue from God, but also from how humans have evolved.

Conclusion

Niebuhr gives us a layered account of human sin and how it affects individuals, how individuals affect one other, how individuals affect society, and how society can affect individuals. The analysis of Niebuhr's anthropology, however, is far from complete. I have examined the nature of sin, but not origins of sin. Niebuhr, just as he is Augustinian in his understanding of sin, looks to Augustine for guidance on original sin. And his use of Augustine is centered on the biblical account of the fall, but he rejects the fall as a historical event; the Genesis account provides a symbol for theological reflection. As stated previously, Niebuhr sees sin as inevitable but not necessary. The reason for this lies in both aspects of human nature. The perspective of Christian realism requires an interdisciplinary approach to the investigation of the origins of sin, and given that humanity is the product of billions of years of evolutionary history, attention must be given to what evolutionary biology and related disciplines have to say about human nature and history. The following chapter will explore Niebuhr's understanding of original sin and place it into conversation with work being done in the field of science

and theology in order to approach a more adequate understanding of original sin and human nature.

Chapter 2: Inevitable but Not Necessary: Theology and Science Informing Original Sin

Having examined Niebuhr's understanding of sin and some important critiques of it, in this chapter I focus on the doctrine of original sin. Niebuhr's doctrine of original sin is grounded in Augustine, but has notable differences that allow for meaningful dialogue with science. I examine the sources that Augustine used to ground his doctrine of original sin, using modern biblical scholarship to critique some of Augustine's interpretations. The most important difference between Augustine and Niebuhr is that Niebuhr saw the fall as symbolic, not historical, which allows him to use some insights from Augustine, but he can re-imagine aspects of it, such as the transmission of sin. I then place Niebuhr's doctrine of original sin in dialogue with the theology and science dialogue, first relating it to physics through the work of Robert John Russell, then with insights from the sciences regarding human evolution, as well as insights from theology and science authors about human origins, evolution, and genetics.

Robert John Russell turns to Niebuhr's understanding of sin and contingency to determine whether a universal contingent can be identified. Russell's work provides a point of departure for bringing information from various disciplines into conversation with Niebuhr's understanding of original sin. Other positions in theology, philosophy, and science will be examined to see whether they offer useful insights to Niebuhr's perspective. Some of these positions affirm the existence of original sin, while others raise questions about the nature and transmission of original sin. After exploring several candidates from biology that might contribute to a prefiguring of sin in human biological history, I argue that intergroup preference shows the greatest promise.

Augustine and Original Sin

Augustine's interpretation of original sin has long been understood to have arisen out of his response to the Pelagian controversy. While it is true that Pelagius, and Pelagians such as Julian, forced Augustine to be more precise about his position and to ground his view on original sin in ways he previously had not, it is not completely accurate to say that these debates were the only genesis of his thought. Before this, Augustine had been in conflict with the Donatists regarding infant baptism. The Donatists believed that the purity of the church was paramount and that the efficacy of the sacraments could be called into question based on the priest presiding over them. Augustine disagreed and argued that God's work in the sacrament is not affected by the failings of the person administering it.¹³⁵ The Donatist controversy helped shape and sharpen Augustine's doctrine of baptism, so when the Pelagians began to speak of problems with infant baptism, Augustine had a position with which to respond.

Before Augustine joined the debate with the Pelagians, some church leaders were already questioning their beliefs. Pelagius' follower, Caelestius, was brought before the Council of Carthage in 411 to answer for his views. He argued that death was not a punishment for sin; Adam would have died even if he had not sinned. In sinning, Adam only harmed himself, not all humans, thus newborns enter the world just as Adam was before the fall. Beyond denying that death is punishment for sin, Caelestius argued that just as humans did not die because of Adam, not all humans are raised because of Christ. The Gospel may lead people toward God, but the law is just as capable of doing so.

¹³⁵ Pier Franco Beatrice, *The Transmission of Sin: Augustine and His Sources*, trans. Adam Kamesar (New York: Oxford University Press, 2013), 17.

Finally, he argued that Christ was not the first or only person to live who did not sin.¹³⁶ Sin, Caelestius believed, was a problem of the will. People knew what the good was and chose not to do it. If this was not the case then God would be open to critique, having created humans with evil in their nature. Therefore, it must be possible for humans to choose not to sin and to avoid it altogether.¹³⁷ The council rejected all six of his points. Pelagius' own understanding of original sin is very similar to that of Caelestius, but he did not go as far as Caelestius in some respects. Pelagius also believed that death was not a punishment for sin; humans were mortal before Adam sinned, and his sin only affected him. Adam serves as a bad example that people follow, but not because sin was transmitted through him. Newborns come into this world the same as Adam was before he sinned.¹³⁸ Augustine disagreed with all of these views. Adam's sin, for Augustine, had direct consequences for all future humans, the first of which is death. Sin also altered human nature; because Adam and Eve were rebellious, God made human flesh rebellious against the spirit.¹³⁹

Augustine's understanding of sin in general, but also original sin, emphasizes the will. In book five of *City of God*, Augustine argues against Cicero to say that just because God knows what humans are going to do does not mean that humans do not have free will. God created humans and human will, but the wills given to humans were good, not evil.¹⁴⁰ The evil will is contrary to nature. This is important for Augustine because he

¹³⁶ Ibid., 29.

¹³⁷ Ibid., 30.

¹³⁸ Joseph Fitzpatrick, *The Fall and the Ascent of Man: How Genesis Supports Darwin* (Lanham, Md.: University Press of America, 2012), 2.

¹³⁹ Beatrice, *The Transmission of Sin*, 42-43.

¹⁴⁰ Augustine, *Concerning the City of God Against the Pagans*, Penguin Classics (London: Penguin Books, 2003), 193.

believes that just because God knew that humans would sin does not make God responsible for sin. God did not make Adam and Eve sin.¹⁴¹ It was their choice to sin; they were not forced to do so.

In the second part of *City of God*, Augustine discusses how the earthly city and the city of God came about, their histories, and their futures. In this discussion, Augustine identifies the first humans as happy in their pre-fallen state, and that without sin, humans would have remained happy, following God's will. But, he claims, they would not have known that this happiness could last forever. This is not to say that Augustine agreed with the Pelagians that humans were always mortal. In his text, *On Genesis*, Augustine states that mortality is one of the punishments for sin and that any physical problems humans have would not have existed prior to the fall.¹⁴² Returning to what he had said in book five, Augustine reiterates that evil is contrary to good, but even knowing that humans would choose to sin, God decided that God could act through and use sinful people.¹⁴³ Augustine identifies evil as the privation of the good.¹⁴⁴ That is to say, evil does not exist, but is rather the absence of the good.

Augustine posits a close relationship between humans and the angels, and therefore looks to the angels first before considering humans. It is clear to him that there is no difference in the essential nature of the good angels and the fallen ones. Any difference had to arise from their wills.¹⁴⁵ They chose to follow their own ends instead of what God willed, which Augustine identifies as pride. This choice is a perversion of

¹⁴¹ Ibid., 195.

¹⁴² Augustine, *The Works of Saint Augustine: A Translation for the 21st*, trans. Edmund Hill O.P., vol. 13, *On Genesis* (Hyde Park, NY: New City Press, 2002), 76.

¹⁴³ Augustine, *City of God*, 449.

¹⁴⁴ Ibid., 454.

¹⁴⁵ Ibid., 477.

reason, according to Augustine, and even though the perversion is wrong, it highlights that the true nature is in fact good.¹⁴⁶

When Augustine turns to human origins, he identifies scripture as the source of knowledge regarding the creation of humans and dismisses the speculation of other thinkers. God created humans directly and started with a single man, whereas other species were created with many individuals at once.¹⁴⁷ Humans were created in the image of God. God made Adam and gave him a soul, which made him rational.¹⁴⁸ As Augustine has stated previously, he believes that the fall introduces death as a punishment to all humans for the sins of Adam and Eve. This is because he argues that offspring cannot be different from their parents, and the severity of their sin actually changed human nature in a negative way. In fact, Augustine states that procreation is so different from human creation that all of humanity could be found in the creation of Adam; therefore, since all future humans were a part of Adam, they share in his punishment.¹⁴⁹

Augustine speaks of two kinds of death; the first is the death of the body, which separates body and soul. As a dualist, Augustine believed in body and spirit as two separate aspects bound together in humans. The body is mortal but the soul is immortal, unless it experiences second death. This death is God withdrawing from the soul, and this death is eternal.¹⁵⁰ Baptism remits sin and keeps infants from experiencing second death. Augustine also states that even if someone has not been baptized, there are ways to escape the second death. If someone dies because he or she acknowledges the saving

¹⁴⁶ Ibid., 472.

¹⁴⁷ Ibid., 502.

¹⁴⁸ Ibid., 503.

¹⁴⁹ Ibid., 512.

¹⁵⁰ Ibid., 510.

power of Christ, or if someone dies for the truth, he or she can be spared the second death.¹⁵¹

Death is not the only punishment for sin, according to Augustine. The narrative of the fall in Genesis states that once Adam and Eve sinned, they became aware that they were naked, were ashamed of it, and tried to hide. Augustine interprets this to mean that the body is no longer obedient to the spirit. In other words, the order that was once internal to humans has been broken; human desires and appetites are no longer in line with reason and the will. This is what leads to the two cities. Some people follow the flesh and some people follow the spirit.¹⁵² Augustine does not completely demonize the creaturely aspect of human nature, however. The human body, or flesh, has been corrupted, and humans are aware of this corruption. Therefore, it is not the body that needs to be avoided or escaped, but rather the corruption. The blame for sin does not come from the flesh; the corruption is punishment for sin, not the cause of sin.¹⁵³

Julian of Eclanum called Augustine's perspective into question. The accepted understanding of original sin at the time, Julian argued, was problematic because it required holding conflicting views. For example, he claimed that it requires the condemnation of marriage, because if sin is transmitted from generation to generation through the conjugal act, then this very act is evil and the devil, not God, is responsible for human nature. This doctrine also argues against baptism. If baptism is actually able to wash away the sins of the baptized, then Julian did not see how people transmit original sin to the next generation. Sin, for Julian, was an accidental property, which cannot be

¹⁵¹ Ibid., 516-517.

¹⁵² Ibid., 547.

¹⁵³ Ibid., 551.

transmitted to another substance. Even if sin could be transmitted, he argued, it would be unfair of God to hold newborns accountable for any wrongdoing, because they have yet to develop free will. And what Julian sees as the biggest problem with the doctrine of original sin is that it makes people believe they are incapable of perfection.¹⁵⁴ Julian not only decries the doctrine of original sin, he also identifies Augustine as a dangerous thinker. Although Augustine is no longer a follower of Manichaeism, Julian argues that he still believes some of their premises, particularly about the transmission of sin. Augustine is depicted as more dangerous than Mani, because he argues that humans are born into a sinful state and created by God, whereas Mani attributes human creation to evil.¹⁵⁵

Augustine and Concupiscence after the Fall

The most important aspect of the corruption of the flesh for Augustine is concupiscence. Human desire is no longer ordered by reason, and the sexual appetite in particular often overpowers reason.¹⁵⁶ In accordance with the biblical narrative, Augustine sees guilt and shame in sexuality connected to the fall. Sexual immorality, he argues, often requires privacy because people are ashamed of what they are doing, but he also sees the same need for privacy in married couples who are engaging in intercourse in order to have children.¹⁵⁷ Before the fall, Augustine sees lust as nonexistent in humans and that sexual intercourse would be governed completely by the will. He rejects the notion that humans would not have reproduced biologically in the garden before the fall, because he sees this argument as suggesting that human sin was necessary to bring about

¹⁵⁴ Beatrice, *The Transmission of Sin*, 31-33.

¹⁵⁵ *Ibid.*, 35.

¹⁵⁶ *Ibid.*, 577.

¹⁵⁷ *Ibid.*, 579.

people who are faithful to God.¹⁵⁸ Procreation would have been very ordered in Augustine's prelapsarian garden. He argues, "The man would have sowed the seed and the woman would have conceived the child when their sexual organs had been aroused by the will, at the appropriate time and in the necessary degree, and had not been excited by lust."¹⁵⁹ Concupiscence is a complicated concept for Augustine, because he sees it as a punishment for sin, not sin itself; but, as it is a powerful aspect of human nature after the fall, it has profound consequences for various aspects of human life, including marriage and baptism.

Julian of Eclanum condemned Augustine for his views on original sin, and believed that Augustine's perspective created problems for marriage and baptism. Augustine saw concupiscence as evil and not a part of human nature proper. His staunch view on this reinforces the need for the transmission of original sin through generations, and so given the attention sexual intercourse received in his analysis of concupiscence, it is unsurprising that Augustine would link the transmission of original sin to the conjugal act. As I noted above, Augustine states in *City of God* that Adam and Eve would have had their sexuality completely ordered by the will before the fall, but this had not always been his position. Earlier in life Augustine articulated a view that Adam and Eve only had spiritual bodies and did not engage in sexual intercourse until after the fall, when they had bodies of flesh that were driven by concupiscence.¹⁶⁰ He later acknowledged that there were several other possibilities. One of those is that Adam and Eve had material bodies, but would have been able to procreate without sexual intercourse. The other is the

¹⁵⁸ Ibid., 585.

¹⁵⁹ Ibid., 587.

¹⁶⁰ Augustine, *On Genesis*, 92-93.

one that we eventually see him adopt, that Adam and Eve had fleshly bodies from the start and would have procreated through the biological means that they do now, without concupiscence.¹⁶¹

Just as he saw there were multiple possibilities for how Adam and Eve would have procreated, he saw several options regarding the nature of sexual intercourse before the fall, though he rejects most of them as not being feasible. The Pelagians did not see a difference in concupiscence before and after the fall. Augustine disagreed with this because he did not believe that Adam and Eve would have engaged in intercourse any time they felt the desire to do so. He also did not believe that they would have felt the desire for intercourse, but would have chosen not to indulge that desire. On the other hand, he was willing to accept the possibility of concupiscence existing prior to the fall, but only if it was created by reason, in the service of compelling intercourse for procreation.¹⁶² And finally, there is the position that Augustine articulated in *City of God*: human sexuality would be completely ordered and controlled by the will.

What Augustine writes in *The City of God* concerning the origin of human sin comes after his arguments against the Donatists and his work on infant baptism. He had already begun his arguments against the Pelagian controversy by the time he wrote books twelve through fourteen of *The City of God*, in 417 and 418 C.E., but it is also important to examine the biblical sources Augustine draws upon when reflecting on human sin. Of course the account of the fall in Genesis chapter three is important for Augustine's perspective, but he draws upon other texts as well, though most of these passages refer only indirectly to original sin. Augustine interprets the command for women to undergo

¹⁶¹ Ibid., 58.

¹⁶² Ibid., 236.

purification after childbirth and offer sacrifice for their sins¹⁶³ as an indication that sin is bound up in the process of birth and the next generation. Reference to God punishing people for the sins of their ancestors, going back three or four generations,¹⁶⁴ supports that people can be punished for the sins of others and that sin can be transmitted to future generations. Even though Julian cites scripture that states that children and parents should not be punished for one another's sins,¹⁶⁵ Augustine argues that the latter refers to humans punishing humans while the former refers to God punishing humans.¹⁶⁶ Augustine's interpretation of certain biblical passages in relation to original sin has been criticized.

Modern biblical scholarship offers alternative interpretations to the connection Augustine tries to make regarding the origins of human sin. Job 14:4 states, "Who can bring a clean thing out of an unclean? No one can."¹⁶⁷ Augustine interpreted this passage as an acknowledgment of original sin; humans are sinful and because of this, children born to humans cannot be clean. It is a support of the biological transmission of sin. Over time, however, disputes arose about the nature of this particular verse. In his commentary on the book of Job, Norman Habel discusses the conflict biblical scholars have regarding the authenticity of the verse. There seems to be a general consensus that the second half of verse four, "No one can," is too short compared to similar passages. Because of this,

¹⁶³ Leviticus 12:6

¹⁶⁴ Deuteronomy 5:9.

¹⁶⁵ Deuteronomy 24:16.

¹⁶⁶ Beatrice, *The Transmission of Sin*, 96.

¹⁶⁷ Job 14:4.

Marvin Pope acknowledges that the verse might not belong to the original text, and scholars such as A. de Wilde delete it entirely.¹⁶⁸

Even if verse four is considered a part of the text, there is disagreement over its interpretation. J.K. Zink identifies three strains of thought about it. Original sin is still one of these strains, but the second is that the verse is meant to express corporate solidarity. Weiser and Terrien provide similar interpretations regarding the unity of humanity: death is inevitable and all humans sin. The third strain of thought is human frailty, focusing on death and the shortness of life, rather than sin.¹⁶⁹ Zink's own interpretation of the verse is twofold. First, its structure is similar to the ways in which rulers are addressed by those serving them. The purpose of these statements is, according to Zink, "to show respect and submission," but statements like these "should not be taken as blanket descriptions of human nature because they are exaggerated."¹⁷⁰ Similarly, *The New Interpreter's Bible's* commentary argues that Job 14:4 is a figure of speech to separate God and Job. It is written in such a way that it presents a logical impossibility in colloquial terms, such as "spin straw into gold."¹⁷¹

The second part of Zink's interpretation deals with the term "unclean," and connects Job 14:4 with another passage that Augustine draws upon for his understanding of original sin, Psalm 51, particularly verse five. The Psalmist states, "I was born guilty, a

¹⁶⁸ Norman C. Habel, *The Book of Job, a Commentary*, The Old Testament Library (Philadelphia: Westminster Press, 1985), 234.

¹⁶⁹ J. K. Zink, "Uncleanness and Sin: A Study of Job XIV 4 and Psalm LI 7," *Vetus Testamentum* 17, no. 3 (July 1967): 354, 357.

¹⁷⁰ *Ibid.*, 354.

¹⁷¹ Carol A. Newsom. "The Book of Job," *The First Book of Maccabees, the Second Book of Maccabees, Introduction to Hebrew Poetry, the Book of Job, and the Book of Psalms* vol. IV of *The New Interpreter's Bible* (Nashville: Abingdon Press, 1996), 440.

sinner when my mother conceived me.”¹⁷² Before exploring the link Zink makes between Job 14:4 and Psalm 51:5, it is important to see how interpretations have changed since Augustine. Historically, most scholars saw Psalm 51:5 as supporting original sin, including Athanasius, Anselm, Luther, and Calvin.¹⁷³ Zink identifies five strains of thought in the modern interpretation of Psalm 51:5. Original sin is the first, and like Job 14:4, human frailty is another. *The New Interpreter’s Bible’s* commentary on Psalm 51, an example of the human frailty school of thought, acknowledges that the Psalm, particularly verse five, has been used in the discussion of original sin. The problem for Augustine, however, is that verse five is not intended to argue for the biological transmission of sin. A better interpretation, according to the *NIB*, is to understand verse five as pointing to the inevitability of sin, that humans are unable to escape it.¹⁷⁴ A third, but less used, interpretation is to see the Psalm as a collective expression of a community united by a “mother,” seeking forgiveness. Although most commentators disagree with it, the fourth strain of thought is sexual impurity, presenting an argument for the sinfulness of procreation. The fifth strain looks to ritual language and sees the psalmist as one who feels unclean and is reaching out to God.¹⁷⁵

Looking to Jewish interpretations of these two verses, Zink argues they are referencing ritual uncleanness, not moral uncleanness, either sin or original sin. The problem is that Christian interpreters are reading these verses through a particular lens.

¹⁷² Psalms 51:5.

¹⁷³ Zink, “Uncleanness and Sin,” 355.

¹⁷⁴ J. Clinton McCann Jr. “The Book of Psalms,” in *The First Book of Maccabees, the Second Book of Maccabees, Introduction to Hebrew Poetry, the Book of Job, and the Book of Psalms* vol. IV of *The New Interpreter’s Bible* (Nashville: Abingdon Press, 1996), 885.

¹⁷⁵ Zink, “Uncleanness and Sin,” 356.

This includes an Augustinian notion of original sin, but also modern conceptualizations of sex and marriage. Sexual intercourse that is open to procreation is not problematic for Christians, but the Hebrews saw sexual intercourse and childbirth as unclean. This is not to say that these actions were morally impermissible or sinful; they were seen as actions that are a part of life and necessary for reproduction, but there were still, consequences including ritual uncleanness.¹⁷⁶ Even though sexual intercourse and childbirth were not necessarily sinful, it is clear from Leviticus 15:18 and 12:8 that a sin offering was needed to purify uncleanness.¹⁷⁷

Interpreting Job 14:4 and Psalm 51:5 to be primarily about the universal nature of sin and uncleanness as linked to ritual purity, not sin, allows for more coherence with biological history. Sexual intercourse, as the only method of sexual reproduction available until very recently in human history, cannot be understood as inherently sinful. God as creator chose to allow creation to evolve using such a mechanism, so if God also chose to condemn sexual intercourse it would be highly contradictory. This is not to say that all sexual intercourse is moral, there are of course instances where it is sinful, namely nonconsensual sexual activity, or rape.¹⁷⁸ The transmission of sin through sexual intercourse itself is an aspect of Augustine's formulation of original sin that should be revised or abandoned.

The linking of intercourse and childbirth to uncleanness raises questions about how humans view their own nature. Just as the Hebrews viewed menstruation, intercourse, and childbirth to result in uncleanness, reproductive technologies raise

¹⁷⁶ Ibid., 359.

¹⁷⁷ Ibid., 360.

¹⁷⁸ Rape may be a part of the biological history of life, but it is beyond the scope of this project to explore this or examine the implications of it.

questions regarding the future of human reproduction. If humans are able to refine genetic engineering to the point where a child's traits can be selected, and then the child implanted via *in vitro* fertilization (IVF) or even grown in an artificial womb, it could change the way people view "natural reproduction." It could be seen as irresponsible to bring a child into the world without being intentional about reproduction and the genetic make-up of the child.

Augustine also appeals to Paul for biblical support for original sin, and clashes with the Pelagians over his interpretation. Of particular importance is the interpretation of Romans 5:12 and the assertion that death followed sin into the world through Adam, and everyone dies because everyone sins. Prior to the Pelagian controversy, Augustine did not reference this verse in regards to original sin. The speculation is that Augustine was forced to engage with this text as a response to the Pelagian interpretation.¹⁷⁹ Taking this verse in the context of the chapter, Paul's view is that sin may have entered the world with Adam, but all people make the choice to sin and that is why they are punished. Paul does not refer to the transmission of sin from one generation to the next.¹⁸⁰ So while the Pelagians were correct in their assertion that Paul did not reference inherited sin, Augustine was not completely wrong, because he affirmed Paul's belief in the universality of sin contrary to the Pelagians.¹⁸¹

Reinhold Niebuhr on Original Sin

Reinhold Niebuhr has problems with how Augustinians and Pelagians have wrestled with the doctrine of original sin. The problem, according to Niebuhr, is that

¹⁷⁹ Ibid., 102.

¹⁸⁰ Ibid., 123.

¹⁸¹ Ibid.

original sin is seen as something that is inherited, or if not inherited then inevitable. But it is also seen as not a part of human essential nature, thus everyone is still accountable for their sins.¹⁸² Following Augustine, Niebuhr identifies sin as an issue of the will, but does not say it is a part of human essential nature. Original sin seems to be a contradiction of free will. Sin is understood as universal, something all humans contend with and succumb to. On the other hand, though, if people inherit sin, either from Adam's sin or from the previous generation, then how can they be held responsible for sinning?¹⁸³ Historically, people resolved this problem in different ways, but Niebuhr disagreed with their solutions.

Niebuhr begins with the Pelagian argument, "actual sins cannot be regarded as sinful or as involving guilt if they do not proceed from a will which is essentially free."¹⁸⁴ He asserts that what would be considered the "original" aspect of original sin for Pelagians does not arise in the will, but is actually a part of the creaturely aspect of human nature. Pelagians' do not consider the fall in Genesis in their understanding of human nature; people are the way they have always been. Niebuhr points out that in his time, liberal thinkers—both Christian and secular—tended to take this position, often identified as the "cultural lag" thesis.¹⁸⁵ It argues that humanity's bias toward evil is not in the will. The problem arises from slothfulness inherited biologically, which causes human culture to fall behind when there are advances in technology. Social problems

¹⁸² Reinhold Niebuhr, *The Nature and Destiny of Man: a Christian Interpretation* (Louisville, Ky.: Westminster John Knox Press, 1996), 242.

¹⁸³ *Ibid.*, 243.

¹⁸⁴ *Ibid.*, 245.

¹⁸⁵ *Ibid.*, 246.

arise in this lag period, when culture is catching up, allowing people to abuse technology or others who are utilizing these advances.

Cultural lag reduces human responsibility for the bias toward evil, but it also asserts that individuals are responsible for their own actions. Niebuhr argues that what this does is to make every sin a conscious act—choosing something evil against what is known to be good. Niebuhr argues that the Catholic doctrine of original sin has more in common with the Pelagian view than the tradition would like to admit, and that the driving force behind such a position is to argue against the notion that human nature is totally depraved, because if it was, sin and responsibility would cease to be meaningful.¹⁸⁶

Niebuhr then returns to Paul and Augustine; even if he sees inconsistencies in their thinking, he believes that their perspective can do a better job of dealing with the complexity of human nature. For example, Paul identifies that human sin can be conscious but also unconscious, or even a mix of the two.¹⁸⁷ The relationship between the actual sin and the inclination to sin is much closer for Paul than for the Pelagians. Niebuhr argues, “the bias toward sin is something more than a mere lag of nature or physical impulse or historical circumstance. There is, in other words, less freedom in the actual sin and more responsibility for the bias toward sin (original sin) than moralistic interpretations can understand.”¹⁸⁸ Niebuhr again highlights the importance of anxiety for sin, but denies that sin or original sin can be reduced to anxiety alone. What is understood

¹⁸⁶ Ibid., 248.

¹⁸⁷ Ibid., 250.

¹⁸⁸ Ibid.

as original sin is anxiety combined with sin. Temptation is successful because humans have succumbed to temptation in the past.¹⁸⁹

Niebuhr explores the connection between temptation and sin because he believes that sin is inevitable, and its inevitability is linked to temptation. And at the same time, while he believes that sin is inevitable for humans, he argues that humans are not free from responsibility for their sin. The source of human temptation, Niebuhr says, is within human nature itself. The human capacity for self-transcendence is the culprit. It allows humans to escape the confines of time and nature. This is not evil; in fact, without it humans would not possess freedom and their creativity would be extremely limited. On the other hand, it also provides humans with temptation. Self-transcendence allows humans to not only imagine other possibilities, but it also allows humans to ponder the most likely path for their lives. It reminds humans that they are free, but this freedom is not without its limits; humans are finite. And yet, humans look at what they have transcended and begin to believe that it might be possible to transcend their finitude.¹⁹⁰

Niebuhr identifies in Christianity what he considers a unique perspective about human nature. Christian thought does not deny that the self is important. As stated in the discussion of the feminist critique of Niebuhr's understanding of sin in the first chapter, human fulfillment cannot mean self-abrogation. What is best for the self, what will fulfill every self the most, is not giving up the self, but aligning one's will with God's will.¹⁹¹ The problem is that this is not what humans do. They place their faith in the wrong place, in their own selves, rather than in God. This is done to attempt to alleviate anxiety, but

¹⁸⁹ Ibid., 251.

¹⁹⁰ Ibid.

¹⁹¹ Ibid., 252.

Niebuhr argues that it actually creates more. People act in ways to secure their place in a contingent world, but on some level realize that the action they are taking distorts the harmony of nature and that the security they desire may in fact not be achieved this way. It is the lack of faith or trust in God that is the “sin” aspect of original sin. Anxiety leads to sin when people lack the proper faith in God, what Kierkegaard and other theologians refer to as the sin of unbelief.¹⁹² Niebuhr realizes that there is a paradox; this perspective on original sin requires the belief that sin is already present in people’s lives. Utilizing Kierkegaard’s work, Niebuhr argues that this paradox actually supports why original sin does not absolve humans of responsibility.

Niebuhr argues that responsibility is connected to the guilt that people experience after sinning. People often are able to deceive themselves, but Niebuhr believes that even people who frequently and consistently sin are unable to completely assuage their conscience all of the time.¹⁹³ People are finite, but sin, as a disruption of the harmony God intends, requires people to overlook their finitude in order to act, and can affect any of the three aspects of harmony—between God and self, between self and other, and within the self—or all of them simultaneously. This can involve denying human finitude in general, trying to change the value of someone or something else—such as prioritizing personal need over someone else’s, or convincing one’s self that a desire requires fulfillment beyond what is needed to actually satisfy. Sin is compounded because not only is the disruption of harmony a problem, but the justification for the disruption is also problematic and the self tries to conceal the justification from itself.¹⁹⁴ Some people can

¹⁹² Ibid.

¹⁹³ Ibid., 256.

¹⁹⁴ Ibid.

be more sensitive to guilt than others can, and Niebuhr articulates a position that people who have achieved more morally are more likely to be aware of their guilt, and that the culmination of this process is to identify the limits of freedom itself. It becomes clear to a reflecting individual that no matter how good they have tried to be, there have been times where there has been personal bias, where their own needs or desires have taken a place of central importance contrary to reality.¹⁹⁵ The standard for conduct comes from God, and even if people are remorseful and repent for their previous wrongs, they know they will be unable to keep the self-deception from happening again. Niebuhr believes that both Pelagians and Augustinians have misunderstood the importance of the limits of freedom.¹⁹⁶

The Pelagian and Augustinian discussion of original sin is also problematic because this debate led the Augustinians to adopt a literalist position. According to Niebuhr, “[i]n countering the simple moralism of the Pelagians they insisted on interpreting original sin as an inherited taint. Thus they converted the doctrine of the inevitability of sin into a dogma which asserted that sin had a natural history.”¹⁹⁷ While Niebuhr emphasizes the history of Augustine’s doctrine of original sin, seeing concupiscence as punishment for Adam’s sin and the transmission of original sin through the conjugal act, he also points out that there have been plenty of Christian thinkers who did not read the Genesis account of the fall literally, that the story is symbol rather than history. Recognizing that the work of Paul has been used to support Augustine’s interpretation, Niebuhr argues that Romans 5:12 does not reference a biological

¹⁹⁵ Ibid., 258.

¹⁹⁶ Ibid., 260.

¹⁹⁷ Ibid.

inheritance of sin.¹⁹⁸ Niebuhr believes that in order to truly understand how humans can still be responsible for sin when sin for humans is inevitable, one must reject the literalism found in the doctrine of original sin.¹⁹⁹ Even if this is done, people will still have problems reconciling these concepts because they are not perceived as rational. Instead, Niebuhr classifies the doctrine of original sin as a dialectic truth. Sin is inevitable, but it is not necessary, and not a part of human essential nature.²⁰⁰ Human nature, however, makes human sin possible. Without freedom, humans would not be able to sin. This is an important distinction and one that must be reexamined in light of developments after Niebuhr's writing.

Robert Russell, Theology and Science, and Original Sin

Robert John Russell attempts to determine whether there is any connection between Niebuhr's inevitability of sin with the natural sciences, namely physics. This is part of Russell's larger project in examining the relationship between science and religion, and as such, he begins with the comparison of entropy and evil, generally, through metaphor. While metaphor emphasizes how two things are similar, it does not collapse the distinction between them. There is a history in theology of seeing God as creating order from chaos. Niebuhr's understanding of the proper relationship of humanity with God and the rest of creation is one filled with the language of order and harmony. Evil, in such cases, is compared to or thought of in terms of disorder, disharmony, something that causes suffering. Entropy is described in similar ways. Whatever energy is used to start something is insufficient to sustain it. In fact, all of

¹⁹⁸ Ibid., 261.

¹⁹⁹ Ibid., 262.

²⁰⁰ Ibid., 263.

creation, including life, tends toward disorder.²⁰¹ Taken to its logical conclusion, entropy results in cells aging and dying, which of course facilitates death in organisms and even ecosystems.

The second similarity between evil and entropy is that both cannot exist on their own. Drawing upon the Augustinian understanding of evil as a privation of the good, evil cannot be independent; there must be a nature or substance that is corrupted. Likewise, entropy is not independent, but rather “a function of the processes of nature, not an autonomous entity in nature. As in theodicy, entropy is parasitic to natural processes, not a participant in those processes.”²⁰² The third point of comparison between entropy and evil is that entropy increases in closed systems. There can be parts of a system that decrease entropy, but the overall entropy of the entire system cannot decrease. In terms of the metaphor, it is possible to say that there are communities that have been able to limit the effects of evil, but the planet as a larger system remains under the influence of evil.

There are similarities between entropy and evil, but for the metaphor to be useful, it should open up new ways of thinking about these concepts. Although Russell provides several examples, the most relevant to the project at hand is the role of entropy in biology. All living beings are open systems and as such they can increase the order in their systems, but at the cost of increased disorder to the rest of the system, be it society, ecosystem, or planet. Given that all organisms are also a part of their environment, such behavior ultimately affects them as well.²⁰³ All of evolution has contributed to this; life is abundant, and while there is almost universal consensus scientifically that evolution is

²⁰¹ Robert J. Russell, *Cosmology*, 233.

²⁰² *Ibid.*

²⁰³ *Ibid.*, 235.

not progressive, there is also an understanding that there is a trend toward increased complexity, but this should not be viewed as a goal or the purpose of evolution. In the context of evil and entropy, however, it raises questions about the disproportionate impact humans can have on the lives of other humans and the rest of creation given their abilities to create more order in open systems.

Metaphors, as stated previously, do not refer only to similarities between two concepts; rather, metaphors highlight both similarities and differences. So while entropy has aspects of similarity with evil, it can also be seen as a positive aspect of creation. When there is a small change in a system, the change in entropy is also relatively small. On the other hand, where there is a major shift in a system, the increase in entropy is greater. When there are changes in people's lives or understanding, there is also a great shift that can result in growth, in adopting new perspectives and practices.²⁰⁴ As I have mentioned already, through evolution individuals and species contribute to the overall increase in disorder in the universe, but life is also something that is valued highly, especially in the Christian tradition. The anthropic principle raises the question, however, of the importance of life in the universe given that the universe appears to be "fine-tuned" for life as it is currently known. For life to evolve at all, let alone self-aware life like humans, entropy is needed.

Now, what connection, if any, can be made between physics and Niebuhr's understanding of sin as inevitable but not necessary? The question Russell asks is whether there is "anything about scientific anthropology which would allow us to ground the problem of moral evil in an empirically explicable universal contingent? If so, then

²⁰⁴ Ibid., 236.

the Augustinian insight into sin and free will might be maintained against contemporary Manichean and Pelagian tendencies.”²⁰⁵ Moral evil is not the same as natural evil; indeed, there are those who deny that the category of natural evil exists. The suffering found in death and the pervasiveness of death in evolution, or physical events that shaped the world and contributed to mass extinctions, are not always seen as evil. Examining these events from a theological perspective, however, it is possible to imagine that the suffering of life prior to the existence of modern humans has shaped human nature. Humans may be the only species we know of that cannot understand that the world is contingent, but contingency is not new to creation. It predates life itself. So the focused question that Russell is asking is whether there is something about the physical universe that could help explain why sin is inevitable but not necessary? If so, where would a universal contingent exist?

Russell looks to the discipline of modern thermodynamics to try to identify a universal contingent. In closed systems, energy is conserved, and if the system is not in equilibrium, it will tend toward a state of lower order; the decrease in order is measured as entropy.²⁰⁶ Open systems, including living organisms, can maintain the level of order they have by increasing disorder in the surrounding environment. It is also possible, however, for order to decrease for a time, followed by a great increase, again at the cost of decreased order in the environment.²⁰⁷ Entropy is not the universal contingent. The area of most interest to the discussion at hand is what is needed for open systems to undergo rapid change. Looking at the rate in which entropy changes during a dramatic

²⁰⁵ Ibid., 242.

²⁰⁶ Ibid., 243.

²⁰⁷ Ibid.

system change shows a distinction between necessary and sufficient. If the excess entropy production is great enough, the change in the system will not cause the system to change its level of order. There is an amount of entropy production that is sufficient to maintain the current level of order within the system. If the entropy production is not great enough, however, it does not mean that a change in order will take place, just that such a change is possible. The change in systems is also contingent; there are external factors beyond the system that act on it with no control from the system itself. This is true of all life as open systems, but also true of other complex nonliving systems.²⁰⁸

It must be stressed at this point that the comparison between Niebuhr's claim of the inevitability of sin and Russell's example of thermodynamics is still operating as a metaphor. There are similarities. Sin is not necessary; it is not a part of human essential nature, yet it is evitable. Likewise, open systems, including humans, are subject to contingencies that can lead either to an increase in order or to equilibrium, the final equilibrium being heat death. It is universal because it applies to all open systems, living and nonliving, just as the inevitability of sin applies to all humans. It is not necessary, though, because both sin and the order of a system are subject to contingencies that shape them, but do not control them.²⁰⁹

There are dissimilarities between the two concepts as well, though. Open systems can theoretically remain open; there could always be an increase in order, not decay, when contingent factors affect the system, so inevitability for thermodynamics is not the same as it is for human behavior. But looking to the far future of the universe, all open systems within it will eventually reach heat death with the expansion of the universe, so

²⁰⁸ *Ibid.*, 244-245.

²⁰⁹ *Ibid.*, 245.

the difference in the end is perhaps not as pronounced.²¹⁰ The major difference between sin and thermodynamics is that history plays a much more important role in regards to sin than changes in order do. A person's experience and memory can make a difference in the way they choose to act, whereas in other open systems, the past does not necessarily play any role in whether or not the system changes. Even with these differences, it is possible to say that at least metaphorically there is some prefiguring or preconditioning toward moral evil in the physical universe, though this prefiguring does not make it necessary.²¹¹

While Robert Russell's discussion of contingency involves physics and thermodynamics, the question he asks is just as relevant for biology and evolution. The sciences can be arranged in a hierarchy in order to show how one field of study influences another. For example, chemistry relies on the laws of physics, but it cannot be reduced to physics. It examines novel properties of matter that physics does not. The same is true of the biological sciences. They are constrained by physics and chemistry, but life cannot be reduced to these other fields. Therefore, while Russell's insight into a potential universal contingent in physics is a good first step in bringing the insights of the field of science and religion into Niebuhr's anthropology, additional insights can be gained by looking to biology and evolution. If a universal contingent is found there, it does not negate Russell's work; it actually provides consonance with it, strengthening the argument that both make from a critical realist perspective. Identifying a biological contingent for the inevitability of sin does not, however, prove the sociobiologists correct. Human nature cannot be reduced to only the biological, and a prefiguring or

²¹⁰ Ibid.

²¹¹ Ibid., 246.

predisposition toward sin is not the same thing as saying that sin is a part of human nature.

Original Sin and Evolution

Niebuhr departs from Augustine's understanding of the fall as an historical event, so this is a good place to begin the exploration of the relationship between evolution and original sin. Though the majority of the discussion around original sin and scripture involves the fall, if the account of it in Genesis chapter three is understood as symbolic and not literal, then the account of creation in chapters one and two are open to similar interpretation. People have interpreted the creation accounts in several ways, but just as Niebuhr distanced himself from the notion that the fall was an historical event, a Christian realist position would need to reject literal readings of the creation accounts. There is ample evidence that the earth is not 6,000-10,000 years old and that life in general, and modern humans in particular, are older as well. In order to determine what that coherence could be, the account of creation according to the sciences must be examined.²¹²

The universe is roughly fourteen billion years old, but life, as it is currently understood, is nowhere near that age. Physical cosmology examines the evolution of the universe and clearly shows that it took time for the particles formed in the big bang to become stars, and stars composed of hydrogen and helium created heavier elements that were needed for life. Earth is approximately four and a half billion years old, but it still took time for life to form. Estimates indicate that life first appeared on earth three and a

²¹² There is a wealth of information written about this subject. I do not intend to provide a comprehensive account of cosmological evolution and of life Earth. Rather, I will endeavor to highlight information that will be useful to the question at hand, namely the evolution of humans and original sin.

half billion years ago, and it consisted of single-celled organisms called prokaryotes, with a singular circular chromosome and smaller fragments of DNA called plasmids. These organisms reproduced asexually, copying all of the genetic material and creating two organisms. Plasmids could be transmitted from one organism to another through conjugation, but that was the only form of genetic differences apart from mutation and mistakes in replication. The leading theory of endosymbiosis suggests that prokaryotes became more complex two billion years ago by combining with one another to form a cell with specialized parts within it, called eukaryotic cells. Lynn Margulis, one of the scholars responsible for the theory, describes endosymbiosis as an example of cooperation in evolution, a point that I will examine in more detail in the next chapter.

Eukaryotic cells have a nucleus that contains the cell's DNA, which can be organized into complex chromosomes. Some eukaryotes are also capable of undergoing sexual reproduction, the combination of genetic material from two organisms. Augustine probably had a slightly different definition of sexual reproduction in mind, but technically, sexual intercourse existed long before modern humans were alive. Although Augustine changed his mind about the sexual activity of humans before the fall, he believed that sexual reproduction was governed by the will, and that concupiscence was included in the punishments of the fall. His understanding likely does not cohere with scientific understandings of sexuality, while the Pelagian position of concupiscence being the same prior to and after the fall is a much more likely candidate. However, if there was a commonality of concupiscence among all organisms that reproduce sexually, it could be said to be inherited, and though not a punishment for the fall, still an aspect of inherited human nature that contributes to human sin.

The problem is that there is no definitive evidence that concupiscence has such a basis, and trying to prove this is beyond the scope of the project at hand. Take the male orgasm, for example. Many scholars can reason that the orgasm would be evolutionarily advantageous, but there is no consensus on whether this is the case or how it would have originated, let alone how to identify whether other organisms achieve orgasm or not. Linking reproduction with a pleasurable feeling could make males more likely to engage in sexual activity, and if this is the motivation for sexual activity, rather than procreation or pair bonding, then it can be argued that sexual desire, not reason, is the driving force of the male aspect of human reproduction.

The scientific community is divided, however, on whether this is actually the case. Just because something could be explained in evolutionary terms does not mean this is how it happened. And even if there was consensus around the male orgasm, it still would not relate to the entire species, just males. For all that is unknown about the male orgasm, even less is known about the female orgasm, and unsurprisingly, there is much debate over whether it would be evolutionarily advantageous or not. There is just not enough evidence to provide the kind of metaphor Robert Russell uses in terms of universal contingency with sexual pleasure and concupiscence. The case can be made, however, that sexual reproduction predates modern humans and that there is a reasonable argument for the notion that enhanced sexual pleasure could lead to an increase in reproductive fitness. Contrary to Augustine, such an argument would say that concupiscence existed prior to rationality and therefore cannot be a punishment for human sin.

One billion years after evolving, eukaryotic organisms became multicellular organisms. Five hundred million years ago fish evolved, followed by reptiles three hundred million years ago, and mammals two hundred million years ago. Primates evolved sixty million years ago, and the genus of *Homo*, to which modern humans belong, evolved just fewer than two and a half million years ago.²¹³ Modern humans are extremely young in terms of cosmological and biological history, with some of the earliest estimates having the first modern humans appearing two hundred thousand years ago. Even if one were to interpret the six days of creation and one day of rest to be symbolic, it is clear that these days would not represent equal periods of time.

It is also important to note that there is a much stronger connection between humans and the rest of creation when looking at the biological history of life. In such a perspective, humans are the product of evolution and not an act of special creation by God. While such a notion can be considered offensive to people who hold a traditional understanding of creation, the fall, and humanity's place in the cosmos, there is coherence between the science and human understanding of God. As the previous chapter details, Niebuhr's anthropology identifies two aspects of human nature, the first being creaturely. This would include physical characteristics and behaviors or predispositions. Many of these characteristics, behaviors, or predispositions have a genetic component, though this does not mean that the creaturely aspect of human nature should be reduced to evolutionary biology and genetics. Almost all traits that are inherited are not determined completely by genetics. Studies of identical twins, who come as close to

²¹³ Although modern humans are not the only member of the genus, the evolution of hominids is complex. For the sake of simplicity, the discussion will not go into more detail here, though later in the chapter will be given some attention given the co-existence of multiple hominid species at the same time.

having the same DNA as possible, have shown that the heritability for most traits is only about fifty percent. In other words, even in the creaturely aspect of human nature, biology is not the only answer.

Humans, like all other organisms, are also affected by their environment. Environmental influences and genetics together shape the expressed traits of individuals, or their phenotype. Unfortunately, the reality is even more complicated than this combination. Historically, there has been a large debate about the role of “nature” (genetic influence) versus “nurture” (environmental influences). It would seem that humans have additional environmental influences that other creatures do not have, but the exclusivity of these factors is not central to the argument at hand. Humans have tools and culture, and their offspring spend a much greater amount of their life in a phase of socialization and learning compared to other species, including primates. Other species, including earlier hominids, also had tool use, and if additional species were found to have culture as well, such findings would not be a threat to an understanding of theological anthropology that tries to incorporate the insights of science into the creaturely aspect of human nature. Culture provides an influence over generations that is not inherited biologically but can be passed on through socialization and education. The categories of nature and nurture are not completely distinct either; there is nature in nurture and there is nurture in nature. Culture can lead to changes in sexual selection. Parents can have predispositions to certain kinds of behavior that shape the way they raise their children. Even decisions parents make before they consider having children can affect gene expression in their offspring. Epigenetics examines changes in gene expression in organisms that cannot be explained by changes to genetic sequences. Clearly the

creaturely aspect of human nature that is informed by the sciences is complex and the human understanding of it is expanding and changing on an ongoing basis.

It is this change that represents another departure from a literal reading of the Genesis account. Evolution is not static, and neither are the life forms that result from it. Organisms encounter changes in their environment because the Earth changes. There is variation in natural processes that can lead to changes in water, temperature, etc., all of which shape the available resources of a given area. Some organisms are able to adapt to these changes better, and the ones that can usually reproduce more than the ones that cannot. The differences in successful reproduction lead to a change in the population of that species. Over time, this process of adaptation to change continues and the species changes. When one population is different enough from another that they are unable to have offspring that can reproduce, they are distinct enough to be considered separate species. Speciation occurs through evolution, but species themselves change through time.

Humans are not the same as they were two hundred thousand years ago and they will not be the same as they are now in two hundred thousand years (if the species survives that long). Part of the creaturely aspect of human nature is changeability. One could contend that an anthropology that changes cannot be used normatively, but I argue that the creaturely aspect of any organism on Earth has changeability as part of its nature. It makes the task more difficult, and any assertions made from such an anthropology must be open to revision if there is a substantial enough change, but the same is true of scientific knowledge. The impact of this change is also blunted by the fact that the creaturely is only one aspect of human nature. While some things may change

biologically, it does not mean that the overall anthropology of humans is fundamentally different when each change occurs.

The science of human origins is complex, but by tracing samples of mitochondrial DNA, which children only inherit from their mother, and the Y chromosome, which is only inherited from the father; examining mutations; and inferring mutation patterns in the past, scientists can identify a common ancestor of females,²¹⁴ often nicknamed “mitochondrial Eve,” and males, often nicknamed “Y-chromosome Adam.” These nicknames are unfortunate because they can lead to the perpetuation of a literal interpretation of the Genesis account, which research does not support. Some scholars argue that the existence of a “mitochondrial Eve” and a “Y-chromosome Adam” reinforces the notion of God’s special creation of Adam and Eve and that all humans descend from them. The majority of scholars understand that the holders of these nicknames are a product of statistics and point out the problems that would arise from such a small starting population. Mitochondrial Eve and Y-chromosome Adam are titles given to humanity’s earliest known ancestors, but who the titles refer to could easily change with additional information, such as an older sample, or new data about mutations in these genetic regions. Additionally, the current holders of mitochondrial Eve and Y-chromosome Adam did not exist in the same time or place in history.²¹⁵

²¹⁴ Rebecca L. Cann, Mark Stoneking, and Allan C. Wilson, “Mitochondrial DNA and human evolution,” *Nature* 325, no. 6099 (January 1987): 35.

²¹⁵ There are numerous studies, each of which provides a different date for Y chromosome. Michael F. Hammer, “A recent common ancestry for human Y chromosomes,” *Nature* 378, no. 6555 (November 1995): 376-78, proposes 188,000 years ago for Adam, while Fernando L. Mendez et al., “An African American Paternal Lineage Adds an Extremely Ancient Root to the Human Y Chromosome Phylogenetic Tree,” *The American Journal of Human Genetics* 92, no. 3 (March 2013): 454-59, puts it at 338,000 years ago.

Another argument against a fixed Adam and Eve is the genetics problems that occur when people who are closely related reproduce with one another. In that situation, there is a higher chance that the offspring will have genetic conditions that their parents have or carry. In other words, for a gene that follows classic Mendelian inheritance patterns, there is a higher chance that the population will express recessive alleles. If this continues over time, the whole population will be less able to survive and there would be an increased chance of extinction. Having a starting population of only two humans would be problematic. Scientific and theological scholar Francisco Ayala has argued that the starting population of modern humans would likely need to be roughly one hundred thousand individuals.²¹⁶ Even as the Roman Catholic Church has been accepting of evolution, the church's official stance on human origins is monogenism, that humans have a single origin of Adam and Eve.²¹⁷ While the question of whether monogenism or polygenism is accurate when it comes to human origins, ultimately I think that it has very little impact regarding original sin. Monogenism has been defended in part because it ensures the universality of sin. All humans descend from Adam and Eve, and therefore all humans, as their offspring, enter the world in a fallen state. However, if the Genesis account is symbolic, there does not have to be a single fall. If sin is evitable but not necessary, whether there were hundreds or thousands of mated pairs of early modern humans, sin was bound to occur. Niebuhr does not put sin into human nature, but humans were bound to sin, so I do not think that a single origin is necessary for the universality of

²¹⁶ F. J. Ayala et al., "Molecular genetics of speciation and human origins," *Proceedings of the National Academy of Sciences* 91, no. 15 (July 1994): 6790.

²¹⁷ Pius XII. *Humani Generis*. Vatican web site. August 12, 1950, paragraph 37. http://www.vatican.va/holy_father/pius_xii/encyclicals/documents/hf_p-xii_enc_12081950_humani-generis_en.html

sin. Perhaps the biggest reason, however, is that given Niebuhr's definition of original sin, I would argue that modern humans may not be the first species to struggle with sin and original sin; original sin could predate the existence of modern humans.

To reiterate, for Niebuhr, original sin is anxiety plus sin. Sin is not a part of human nature, but human nature does allow for the possibility of sin. Freedom is necessary in order for sin to occur. If humans were not free to make their own choices, they would not be able to choose to act against the harmony that God intends in relationships. The question of how free will exists has a long tradition, but using Niebuhr's understanding of human nature, I would argue that human freedom is dependent on, but not reducible to, the capacity for self-transcendence. It is clear in *The Nature and Destiny of Man* that Niebuhr sees a close relationship between self-transcendence, freedom, temptation, and sin. Humans have self-transcendence, so they are able to see beyond instinct and look at themselves from an outside perspective, but at the same time they realize that they are finite and that the world is contingent. Without self-transcendence, anxiety would be much less of a problem for humans because they would only experience anxiety when food was scarce, or when they happened upon a dangerous predator. Knowledge that there are random circumstances in the world beyond their control and that there is a limit to the resources around them locally as well as globally, can generate much more anxiety. And as Niebuhr states, this anxiety can be used in productive ways. Human creativity to try and mitigate the contingent nature of their world has led to agriculture, the domestication of animals, and the rise of technology. The question that is relevant to the discussion at hand is whether modern humans are the only organisms that possess self-transcendence. Although we do not have

definitive proof of it, I would argue that there are other species of hominids that were likely self-transcendent.

Modern humans existed simultaneously with several other species of hominids, and these other hominid species evolved prior to modern humans. Genetic studies have shown that humans have Neanderthal DNA present in their genome. A study earlier this year reports that roughly twenty percent of the Neanderthal genome may be present in humans, though typically only two percent is found in any given person. Over time, research has supported the belief that interbreeding occurred between *Homo sapiens* and *Homo neandethalensis*. Scholars in theology and science have spent a great deal of time discussing *Imago Dei* and whether it is only modern humans who possess the image of God. I believe that kind of inquiry can be applied to the question of self-transcendence with other hominids. Choosing to reproduce sexually with another species certainly seems to be an example of having the capacity of self-transcendence, because it likely requires the ability to think of another organism that is outside of the population as a viable mate.

J. Wentzel van Huyssteen argues that humans tend to believe that “language, self-awareness, consciousness and mythology” are what define humans as such, but because these cannot appear in the fossil record, scientists look to other tangible examples that indicate whether hominids were capable of symbolic thought.²¹⁸ For van Huyssteen, examples of this would include art (including cave paintings), improvements to or redesigning of tools, and personal ornamentation.²¹⁹ There is also debate over whether

²¹⁸ J Wentzel Van Huyssteen, *Alone in the World? Human Uniqueness in Science and Theology* (Grand Rapids, Mich.: William B. Eerdmans Pub. Co., 2006), 167.

²¹⁹ *Ibid.*, 167-68.

Neanderthals buried their dead. I would argue that burial rites also represent the capacity for self-transcendence. In order to envision something beyond lived existence it would take a similar kind of mental ability as modern humans have. There is debate, though, about what is symbolized in the rites of Neanderthals, with some scholars saying that the rites of modern humans were more symbolic than those of the Neanderthals. The argument I am suggesting, however, does not require definitive proof. Even if Neanderthal burial rites were not as symbolically laden as the burial rites of modern humans, the existence of such rites at all means that Neanderthals wrestled at least on some level with the nature of existence after death. And because Neanderthals are older as a species than modern humans, it is possible that Neanderthal burial rites predate those of modern humans. While it is beyond the scope of the project at hand to determine conclusively whether sin and original sin predate modern humans, Neanderthals raise some important questions in this area and hold possibilities for future theological as well as scientific research. Starting from a theological premise of Neanderthals believing in original sin, a scientific research project could be developed to determine whether or not they were capable of such a belief.

When it comes to bringing the insights of evolution to bear on the doctrine of original sin, there are many scholars who have looked to selfishness as the answer. “Nature red in tooth and claw” is a famous Tennyson line depicting the brutality of evolution. Darwin described life as a struggle for existence, an account that seems agreeable with Niebuhr’s assessment of the contingent nature of life. The tendency to look toward one’s own interests even at the expense of others, what Niebuhr would call sin, is understood as common sense or the best approach from an evolutionary

perspective. Reproductive fitness is enhanced with access to sufficient resources. Richard Dawkins' famously titled book, *The Selfish Gene*, has popularized the notion that all of evolution can be boiled down to competition for resources of all kinds.

Dawkins provides a particular example using game theory to illustrate the benefit to an organism in looking to its own needs first. Imagine a population of birds who have a parasite problem. The parasites can be removed through grooming, but the birds cannot groom themselves.²²⁰ The solution is to work together, have one bird groom the other and then switch. Dawkins explains that cheaters will do better in this system than cooperative birds. They get the benefit of being groomed, without expending the energy needed to groom another bird.²²¹ This is an example of the "free rider" problem, and if there are too many cheaters, the overall fitness of the population would decrease.

It would seem that the cheater mentality could be a universal contingent in biology. If life is a competition for resources, with the organisms more capable of securing resources and mates at the expense of others reproducing more often or more successfully than those who are not as capable, then it would stand to reason that if there is a genetic basis for selfishness, each generation would have some, if not increasingly more, individuals with selfish tendencies. Certainly there is a wealth of literature in theology and science that examines selfishness in evolution and original sin. There is even a book entitled *Original Selfishness*.²²²

New Evolutionary Metaphor: Intergroup Preference

²²⁰ Richard Dawkins, *The Selfish Gene*, 183.

²²¹ *Ibid.*, 184.

²²² Daryl P. Domning, *Original Selfishness: Original Sin and Evil in the Light of Evolution*, (Aldershot, Hants, England: Ashgate, 2006).

However, I believe that conflating selfishness with original sin is too simplistic and is ultimately reductionist. Instead, I would argue that a better candidate for a universal contingent in biology that can be metaphorically related to original sin would be the concept of intergroup preference, defined as “a bias toward those within one’s group and against those outside of one’s group.”²²³ That being said, I am not claiming that intergroup preference is universal to all life. There is evidence that intergroup bias appears in rhesus macaques, a species of monkey that separated from the evolutionary tree of apes (and hominids) around thirty million years ago.²²⁴ While it is possible that intergroup preference could be an example of convergent evolution, independently evolving in separate lineages, it is also possible that this trait was present in a common ancestor and passed on to monkeys and apes. If the latter is the case, then intergroup preference would be universal for hominid evolution, and since original sin is only attributed to modern humans, and possibly closely related hominids, this is sufficient for the task at hand.

In order to determine whether rhesus macaques exhibited intergroup preference, researchers from Yale performed seven experiments with three goals in mind. First, they wanted to know whether macaques distinguish between ingroup and outgroup independently.²²⁵ Then they wanted to know if macaques acted like other primates and relied only on biological traits to sort individuals into categories, or if preferences could

²²³ Neha Mahajan, et al., “The evolution of intergroup bias: Perceptions and attitudes in rhesus macaques,” *Journal of Personality and Social Psychology* 100, no. 3 (2011): 387-405.

²²⁴ *Ibid.*, 390.

²²⁵ *Ibid.*

be given based on more arbitrary traits, like humans do.²²⁶ Finally, they wanted to determine if members of the ingroup were viewed favorably and members of the outgroup viewed negatively; in other words, does the preference become a bias.²²⁷ The results indicate that macaques do indeed differentiate on their own between an ingroup and an outgroup. They spent more time looking at the pictures of macaques that were not in their group. To ensure this was not simply because the faces were unfamiliar, the researchers created images of the outgroup that would be more familiar to the test subjects than the images they used from the ingroup, and the results were the same.²²⁸ They also placed a random object with images and were able to show that macaques were able to identify the images shown with the same object as a group, and exhibited the same behavior, increased attention, to the outgroup.²²⁹

In order to determine whether there was bias, they created sequences of images where test subjects would be shown series of images of ingroup and outgroup members and positive and negative objects, in this case, images of fruit and spiders respectively. They hypothesized that less time would be spent looking at each series if they were consistent, that is, if images of the ingroup and fruit, or the outgroup and spiders, were shown sequentially. If they were shown in an inconsistent sequence, ingroup then spider or outgroup then fruit, there would be no decrease in the amount of time spent looking at the images.²³⁰ Interestingly, the researchers found that the males did follow the hypothesis and spent less time looking at the consistent sequences, but females did not.

²²⁶ Ibid., 389-390.

²²⁷ Ibid., 390.

²²⁸ Ibid., 393.

²²⁹ Ibid., 396.

²³⁰ Ibid., 398.

This could be, they argue, because male primates are typically more involved in intergroup conflict and aggression.²³¹ Further work would have to be done to determine whether that is the case. They conclude their discussion by stating that human intergroup bias could share an evolutionary heritage with a number of primate species.²³²

Intergroup bias coheres better with Niebuhr's definition of original sin than selfishness does because intergroup bias reflects anxiety and sin. Intergroup preference generates anxiety. Humans, or macaques, are quite capable of identifying who is part of the ingroup and who is not, and those who are not in the ingroup receive more attention because of the presence of a possible threat. This preference highlights the anxiety that someone who is not a part of the ingroup represents, but it is not until the preference becomes a bias that sin becomes a possibility. It is one thing to identify another as part of a different group and worry that their presence could potentially pose a danger, but it is another thing to view that individually negatively simply because they are not part of the ingroup. Even if it is expected that organisms would care more about those closely related to them, this kind of argument does not hold up because humans, and even macaques, are capable of delineating between ingroup and outgroup using arbitrary markers. In the social setting of humans, this means that all sorts of group lines can be drawn over biological categories and cultural categories; the possibilities are almost endless: race, gender, religious affiliation, orientation, sports teams, size, politics, aesthetics, geography, language, vocabulary or pronunciation, etc. Selfishness can apply to groups, but often when used in reference to evolution it is describing individual behavior necessary for an organism to pass on its genes. Intergroup bias, on the other

²³¹ *Ibid.*, 400.

²³² *Ibid.*, 402.

hand, is inherently social; individuals possess this bias—males more so than females, at least in macaques—but the bias itself is built around group membership. This understanding also fits with the attention that Niebuhr gives to the social dimension of sin.

Finally, intergroup bias is related to Niebuhr's understanding of original sin because of the issue of responsibility. How are humans responsible for sin if it is something they inherit? Niebuhr wants to keep people accountable for sin while still holding to the doctrine of original sin, as well as keeping sin out of human essential nature. Looking to selfishness as a metaphor for original sin cannot maintain this distinction. Selfishness, evolutionarily speaking, would be helpful, and possibly even responsible, in order to exist and reproduce. If this is passed down from generation to generation, it becomes a part of human essential nature, and raises the question of whether people are responsible if their genes made them do it. Of course, such an argument would be overly deterministic; however, if we appeal to intergroup bias there is room to separate responsibility and essential nature. Intergroup preference is not itself a bad thing, the problem is when preference becomes bias. The problem is that it appears that even the bias could come from a common ancestor with macaques. In order to deal with this issue, I will turn to a final analogy: genetic diseases and genetic predispositions.

If original sin is understood to be transmitted from generation to generation, and if Augustine viewed this transmission as tied to the conjugal act, there should be no surprise that original sin could be viewed as a genetic defect that is inherited from one's parents. The problem with this kind of argument is twofold. First, it is a reductionist understanding of human nature that reduces human behavior to biology. Secondly, if this

were the case, then it would remove the question of responsibility. If humans are determined genetically, and there are genes that code for aggression, violence, selfishness, etc., there is no problem. Humans acting this way would simply be seen as following the natural inclination to reproduce at whatever cost. But even Richard Dawkins, the champion of the selfish gene, says that humans have the freedom to overcome their genes. I would argue that it is better to think metaphorically about the inheritance of original sin in comparison with a genetic disease.

Typically people are not seen as responsible for genetic diseases they have inherited. If someone inherits the BRCA1 gene and develops breast cancer, that person is not seen to be at fault. Responsibility, however, is not completely gone in the discussion of genetic diseases. One may not be seen as responsible for inheriting a genetic disease, but parents could be viewed as responsible if they transmit a genetic disease to their children. One hundred years ago, people were not aware of the mechanism of inherited disease and were unable to do anything about it. Even now it is possible to not be aware of an existing genetic condition before reproducing. The problem is complicated further because it is possible to be a carrier for a genetic disease but not actually have it. If two parents who are carriers conceive and the gene follows the classic Mendelian dominant/recessive pattern, then they would have a twenty-five percent chance of the child having the disease, a fifty percent chance of the child being a carrier, and a twenty-five percent chance of the child neither having the disease nor being a carrier. It could be argued that even without malicious intent; ignorance of a genetic condition does not absolve responsibility.

Genetic counseling and prenatal genetic diagnosis are increasingly used to determine whether there are potential problems with a couple wanting to conceive a child. When used in tandem with in vitro fertilization, it is possible to screen embryos for specific inherited diseases before implantation and to move forward with only those embryos that do not have the affected alleles. Even if there are no known conditions in their family history, people trying to have children could get tested. Original sin in this metaphor is something that all humans possess,²³³ but not everyone may be aware of it. Not knowing would not eliminate responsibility for passing on intergroup bias, whether biologically or through socialization.

On the other hand, there are instances where people do assign responsibility for an inherited genetic predisposition. Type-2 diabetes is an example of a disease that people are still seen as responsible for because it is associated with obesity, and the development of both of these conditions can be attributed to poor health decisions by the person affected. An inherited predisposition to these diseases is not seen as an escape from responsibility. In fact, some would argue that if people know they have a genetic predisposition to these illnesses then they should be taking extra steps to avoid the risk factors that lead to their development, and if people do not take these steps, they are being irresponsible. Original sin, I would argue, is more like a genetically inherited predisposition than a disease.

Placing Niebuhr's doctrine of original sin into conversation with the theology and science dialogue, as well as with insights from the biological sciences, creates more distance from Augustine's perspective. Asserting beliefs that concupiscence predates

²³³ There are Christian traditions that do not believe in the doctrine of original sin, but from a Niebuhrian perspective, original sin is universal.

modern humans and the possibility that other hominids may have struggled with original sin first would be problematic for an Augustinian view, but these kinds of arguments could be accepted in a Niebuhrian perspective. If we interpret the fall as symbolic, the theological understandings of sin have metaphorical connections to thermodynamics and intergroup preference. There is something about nature and human nature that prefigures a tendency toward sin, and combined with anxiety leads to the inevitability of sin.

Without a historical fall, Niebuhr cannot turn to the past to find a time when humans were perfect, or when they lived in total harmony with what God willed. The next chapter examines where Niebuhr identifies human perfection instead. If humans were created good, and part of human nature is creaturely, then human biological history may provide insight into human perfection.

Chapter 3: An Incomplete Fall Outside of History: Original Righteousness in Dialogue with Theology and Science

The discussion of original sin in the previous chapter shows how human action does not have to conform to human nature. Even when humans act against their nature, there is an awareness that something is wrong. There is an impulse to question why I am not living according to a higher standard. Reinhold Niebuhr identifies this impulse as original righteousness, which he grounds in the theological virtues. Because the theological virtues represent the perfection of the second aspect of human nature, and humans are not perfect in this regard, Niebuhr refers to original righteousness as the memory of original righteousness, not the attainment of it. Starting with an exploration of why Niebuhr rejects the notion of total depravity, this chapter will lay out Niebuhr's understanding of original righteousness and connect it to the theological virtues. The theological virtues also interact with natural law, clarifying and correcting. I will then argue that while it may seem improper to look to the natural sciences and human biological history for a connection to original righteousness, with a focus on cooperation and empathy as biological anchors for the memory of it. These characteristics allow for the development of self-transcendence and the kinds of mental faculties that are necessary for the possibility of a memory of original righteousness. Because of the nature of original righteousness, one cannot discuss it without also discussing original sin. The two concepts are bound together and affect one another.

Total Depravity

Niebuhr argues that even though sin cannot be denied, and humans have a tendency or a proclivity to it, humans are aware that this is not the way they are supposed

to be. People either imagine a time without sin, such as before the fall, or they have an awareness of some kind of moral code that they know they have not been able to uphold.²³⁴ They may not reference sin directly; instead, people may describe it as a cultural problem, such as cultural lag, or human institutions not keeping up with human understandings of justice.²³⁵ The distinction between “ought” and “is” has been a longstanding theological and philosophical issue. Niebuhr sees the tendency in humans to know that things are not the way they should be as a challenge to the notion of total depravity. In other words, Niebuhr disagrees with Protestants, usually Calvinist but not exclusively, who argue that the fall has completely tainted human nature and that humans are not capable of identifying the good on their own. Niebuhr is not denying that humans have been affected by sin, nor that even human reason is free of such influence. As has been stated before, people are able to convince themselves that their own interest is really what is best for the community. Humans are also in need of Christ, but Niebuhr goes on to say that if people do not have a sense of good and evil already, they will not understand the different vision of life that Christ offers and will not feel the need for the hope Christ provides.²³⁶

Niebuhr is so convinced of humans’ widespread awareness that things should be better that he states that any notion of total depravity of human nature has to be rejected based on universal human experience.²³⁷ Humans may be sinful, but “sin neither destroys the structure by virtue of which man [sic] is man nor yet eliminates the sense of obligation toward the essential nature of man which is the remnant of his perfection. This

²³⁴ Niebuhr, *The Nature and Destiny of Man*, 265.

²³⁵ *Ibid.*, 266.

²³⁶ *Ibid.*

²³⁷ *Ibid.*, 266.

sense of obligation is, in fact, the claim which the essential nature of man makes upon him in his present sinful state.”²³⁸ Sin does not do enough damage to human nature to the point that humans are depraved totally; there is still something of essential human nature that challenges humans in their sinful state. This is what Paul is referring to when he says that he does not do what he knows he should, and does the things he knows he should not.²³⁹ Even in Christianity, which articulates a doctrine of original sin and whose theologians have argued for total depravity, such assertions cannot be supported. Niebuhr references the work of other theologians who agree with his interpretation that sin does not destroy all sense of the good in humans. Niebuhr finds support in the works of Thomas Aquinas²⁴⁰ and Augustine²⁴¹ for the same position.²⁴²

The problem, Niebuhr argues, is similar to misunderstandings of original sin. In an attempt to defend the fall of humanity as symbol or myth, people make the mistake of interpreting the story as an historical event. Theologians, Niebuhr says, want to argue against people who want to dismiss any notion of the fall as simply myth, but in doing so, the tendency is to interpret the Genesis account literally, and see the fall as something that took place in history. And when working from this position, it is easy to see humans and say that after the fall, they are no longer living in accordance with God’s will. Therefore, human perfection no longer exists, though it did before the fall.²⁴³ Niebuhr goes on to say that the problem is not only biblical. Stoic philosophers also saw the past

²³⁸ Ibid., 272.

²³⁹ Romans 7.

²⁴⁰ Aquinas, *Summa Theologica*, II-I, Q 85, A1, <http://www.newadvent.org/summa/index.html>.

²⁴¹ Augustine, *The Confessions of St. Augustine* (Springdale, PA: Whitaker House, 1996), 171.

²⁴² Niebuhr, *The Nature and Destiny of Man*, 267.

²⁴³ Ibid., 267-268.

as different from their present age, and that humans had existed in harmony and innocence.²⁴⁴ Even in individual human development, Niebuhr sees a tendency for people to look to the past with fondness. People look at how their lives have turned out and see childhood as a time of innocence, before they knew better. Even with these other sources, though, Niebuhr still maintains that a misinterpretation of Genesis is what contributes the most to Christian understandings of paradise and human perfection before the fall, and total depravity afterward.²⁴⁵ However, as seen in the previous chapter, an evolutionary understanding of creation does not cohere with the notion of a time of perfection before an historical fall. Original sin, properly understood, shows the preconditions for human sin existed at least in part before the evolution of modern humans, and it is possible that even sin itself predates our species. Therefore, a symbolic or mythical interpretation of the fall cannot correspond to a time in history when humans were perfect.

The literal interpretation of the fall had two consequences for Christian understanding of human nature. Reformed Protestants tended toward the language of total depravity, a notion that the fall corrupted completely humanity's capacity for understanding the good. Niebuhr argues that some go as far as to say that the fall also corrupts the notion that humanity was made in the image of God. Catholics, on the other hand, took a different approach. For them, perfection before the fall was a gift from God, a *donum supernaturale*. Because of sin, God rescinded the gift, so what was lost to humans was not essential to their nature.²⁴⁶

²⁴⁴ Ibid., 268.

²⁴⁵ Ibid.

²⁴⁶ Ibid., 268-269.

Understanding the fall in its proper context, however, can alleviate these problems. As stated above, sin does not eliminate humanity's capacity for virtue nor does it eradicate a sense of obligation, that there is a higher standard to which people should be reaching. The image of God is not completely gone, even if it is thoroughly affected by sin. Likewise, something of human perfection remains; it is a part of the essential nature of humans, not a supernatural gift that was rescinded. Niebuhr calls this the erasure of the distinction between "a completely lost original justice and an uncorrupted natural justice. What is called original justice in Catholic thought really represents the requirements of human freedom in its most ultimate sense. Natural justice represents the requirements of man as creature" (276).

In addition to the sense of obligation that people feel, or a standard beyond sinful life to which they feel called, Niebuhr also speaks of human freedom. Both of these elements are crucial to his understanding of original righteousness. Once the possibility of a chronological understanding of human perfection before the fall is ruled out, two questions remain. What precisely does Niebuhr mean by original righteousness, and where is original righteousness located if not in a time prior to the fall?

A human capacity that will only briefly be mentioned, but could be the subject of substantial follow up in future work is *synderesis*. *Synderesis* is a habit whose focus is the first principles of practical reason. According to Aquinas, "the first principles of practical reason are nothing other than the rational creature's grasp of the intelligibilities inherent in created existence."²⁴⁷ The most commonly cited of these first principles is to pursue

²⁴⁷ Jean Porter, *Nature as Reason: A Thomistic Theory of the Natural Law* (Grand Rapids, Mich.: Eerdmans, 2005), 263.

the good and to avoid evil.²⁴⁸ There is disagreement, however, over the moral weight of first principles. Aquinas views this first principle about seeking the good “as nothing other than the reflection in the human intellect of a universal tendency to seek the good in accordance with the creature’s own specific form of perfection, a tendency which in the case the human creature is expressed through the universal desire for happiness.”²⁴⁹ An action can only be seen as good in the moral sense “when informed by moral principles contained in the natural law and applied through *synderesis*.”²⁵⁰ Robert Greene, on the other hand, argues that Bonaventure takes *synderesis* out of the intellectual aspect of human nature and places it in the affective, and in so doing, made *synderesis* more of an instinct.²⁵¹

Aquinas, however, does not rule out *synderesis* as being able to inform principles that contribute to human perfection. Porter argues that the “inclinations of the human person similarly provide the intelligible principles in terms of which she attains her perfection, thus attaining union with God in the way connatural to her as a specific kind of creature.”²⁵² The caution is not to assume that one can arrive at specific moral norms from the inclination to the good without rational reflection.²⁵³ Later in this chapter Niebuhr’s explanation of the ultimate law is explored. The kind of reflection he does

²⁴⁸ *Summa Theologica* I-II 94.2.

²⁴⁹ Porter, *Nature as Reason*, 264.

²⁵⁰ Anthony Celano, “The relation of prudence and *synderesis* to happiness in the medieval commentaries on Aristotle’s ethics,” in *The Reception of Aristotle’s Ethics*, ed. Jon Miller (Cambridge: Cambridge University Press, 2012), 152.

²⁵¹ Robert A. Greene, “Instinct of Nature: Natural Law, *Synderesis*, and the Moral Sense,” *Journal of the History of Ideas* 58, no. 2 (April 1997): 173.

²⁵² Porter, *Nature as Reason*, 266.

²⁵³ *Ibid.*

surrounding the theological virtues, and specifying the law in community are examples of rational reflection that this natural inclination needs.

In future work, it would be useful to see how Aquinas' understanding of *synderesis* contributes to the creaturely aspect of human nature, providing additional support for Plaskow's concern about not engaging the positive aspects of human nature. An innate drive toward the good, even if it needs to be adjudicated through practical reason and the moral virtues, would certainly be a contributing factor to original righteousness. It could also provide additional support for interpreting Niebuhr in a virtue ethics framework. There is no direct link to Niebuhr using the term, but Augustine speaks of *synderesis* as a habit as well, and if this habit is a natural inclination of humans, it would certainly be included in Niebuhr's understanding of the creaturely aspect of human nature.

Original Righteousness

In order to understand the nature of how sin affects humans, Niebuhr uses a medical analogy. Besides death, Niebuhr argues that any kind of disease or condition can provide insight into the concept of health. For example, even though a blind person cannot see, she or he still has eyes, but something is not functioning properly with them and thus impairing or prohibiting sight. I would expand that argument to say that whatever caused the blindness could teach people something about the structure or nature of the eye and its function.²⁵⁴ The analogy is that even though humans may sin, they are still human; sinning cannot destroy the essential nature of humans.²⁵⁵

²⁵⁴ Ibid., 266.

²⁵⁵ Ibid., 267.

The question remains, however, as to where original perfection can be found in humans. Niebuhr, using the medical analogy again, argues that an organism that has a diseased part is not considered healthy. If, for instance, only one organ is affected by the disease, the rest of the body is healthy, but as a whole the person is not considered healthy. Even though the person may be considered diseased, as long as there is life, some element of health remains. In such cases, health cannot be located in a specific spot in the body.²⁵⁶ Niebuhr says that the same is true when speaking of humans and sin. All humans sin, therefore all humans—including their natural capacities, such as reason—are affected by sin. Niebuhr argues that anything that helps humans remember the harmony of relationships that God intends for life represents health, and while a specific location for it cannot be found, “it is possible to find a locus for the consciousness and the memory of an original perfection.”²⁵⁷ This memory is rooted in the human capacity for self-transcendence. When humans transcend themselves, they can identify themselves as individuals who are part of a much larger picture; as a finite organism, anxiety has caused the self to act in ways that do harm.²⁵⁸

There is a distinction between the memory of original perfection and having that perfection. This memory cannot be equated with obtaining perfection. Such confusion is likely, though, because when looking back on their past actions when they are transcendent, people assume that the reason they can now identify that they had acted wrongly is because they have become better.²⁵⁹ The problem is that people take their past perspective into account when acting, and then they use it to justify their own interests.

²⁵⁶ Ibid., 277.

²⁵⁷ Ibid.

²⁵⁸ Ibid.

²⁵⁹ Ibid.

The resulting act is sinful, though Niebuhr admits there can be differing amounts or levels of self-interest and self-deceiving measures in action.²⁶⁰ If one must locate original perfection temporally, then Niebuhr would say that it exists before action, but action is a very broad term here, referring even to thought and desire. The definition of action in this case is tied to anxiety. When a person acts (or thinks or desires) out of anxiety, the result has been affected by sin. Humans are not aware of this at the moment of action, but once they have acted and transcend the situation, they can identify the problem.²⁶¹

Such an understanding of original perfection is also consistent with a symbolic reading of the fall in Genesis. The first action described in the fall narrative is Adam's sin. There is no discussion of action prior to sin, so Adam and Eve were in the state of original righteousness before they acted against God's will. Niebuhr sees this as symbolic of humanity's history as well. Original righteousness is not found in history, but it is a part of humans who do act in history, and sin infringes upon it. Sin is bound up in self-deception; people want to believe that when they are acting in their own selfish interest they are actually acting for the benefit of all. In this case, sin is trying to present itself as part of human righteousness.²⁶²

Because Niebuhr argues that original righteousness, or at the very least a memory of original righteousness, is part of human essential nature, he must deal with the critique of why human action is affected by things not in their essential nature, such as sin, and do not live in full accordance with their essential nature. The response to the first issue is that sin is similar to a disease that affects health. Secondly, as I addressed in earlier

²⁶⁰ *Ibid.*, 278.

²⁶¹ *Ibid.*

²⁶² *Ibid.*, 280.

chapters, humans do not live in accordance with their essential nature because of the influence of sin and human freedom. Freedom is what allows for a distinction between essential nature and living in accordance with that nature.²⁶³

In trying to address the problems he sees with the tradition's handling of original perfection, Niebuhr wants to separate human nature from living in complete accordance with that nature.²⁶⁴ He returns to examples of the physical aspects of human nature, saying that blindness does not change the general norm in terms of the human anatomy of functioning eyes. In other words, humans as a species have particular biological properties, but individuals within the group may have variations. Such an understanding of human nature makes sense in the biological context; as stated in the previous chapter, there is flexibility and variation in modern humans. It also meshes with a virtue perspective. The virtues are the same for all humans, but each individual has her or his own predispositions to the virtues, and what is considered virtuous for one may not be for another. While this discussion seems focused on the creaturely aspect of human nature alone, the same applies to its spiritual aspect. Freedom allows humans to act in ways that are contrary to their nature.²⁶⁵ The possibility of humans acting against their nature comes from their nature; without freedom, humans would be unable to do so.

If we ask where original righteousness is located, we could also ask where human freedom is found. Niebuhr grounds it in the theological virtues. They are the necessary foundation of freedom, not an addition to it. Taking them away means that human freedom will cause humans to sin. Humans are sinful and are unable to acquire the

²⁶³ Ibid., 269.

²⁶⁴ Ibid., 269.

²⁶⁵ Ibid.

theological virtues, but at the same time, they are not given to humans as though human nature was incomplete without them.²⁶⁶

Theological Virtues

Niebuhr argues that faith is the foundation of the theological virtues; hope and love are both grounded in and related to faith. But love also has independent elements that are related to human freedom. Faith in God and what God is doing in the world contributes to the perfection of human freedom because it alleviates human anxiety. Instead of being concerned with the contingency of the world to the point of turning away from God and toward to the self in order to secure one's place in the world, faith allows humans to trust in God's will and remember that they are finite and cannot solve everything on their own.²⁶⁷ Niebuhr views hope as a specific kind of faith. Whereas faith deals with anxiety in general, hope focuses on the future. Humans can envision numerous, even countless, future possibilities; without that hope for the future, including human wellbeing, humans would be overcome with fear, or a sense of powerlessness. For this reason, Niebuhr considers belief in the existence of God as part of human essential nature.²⁶⁸

Love is related to human freedom on its own, but also has an aspect that is dependent on faith. Freedom needs love in order to connect people to each other. Niebuhr says that the creaturely aspect of human nature alone is not enough to form and maintain community.²⁶⁹ Humans, because they possess freedom,²⁷⁰ have distinct personalities and

²⁶⁶ Ibid., 272.

²⁶⁷ Ibid., 271.

²⁶⁸ Ibid.

²⁶⁹ Ibid.

as individuals are isolated from one another. It is possible for humans to be in relationships with other life, human and otherwise, but those relationships would be incomplete without love. According to Niebuhr, those relationships cannot “do justice to both the bonds of nature and the freedom of their spirit if they are not related in terms of love. In love spirit meets spirit in the depth of the innermost essence of each.”²⁷¹ Love allows for the full expression of relationship or community.

Love is what permits humans to see the other as more than an object, as a subject, and this is where love is dependent on faith as well. If people do not have faith, they cannot escape their own interests and be open to what love has to offer. Additionally, humans have to be in relationship with God, because without God, spirit meeting spirit would not achieve its potential. Without God, the imagination is limited to what humans can envision love to be. Niebuhr looks to scripture to illustrate his point. The greatest commandment is to love God with everything, and to love your neighbor as yourself.²⁷² Loving the other is important, but it is placed in the context of love of God, and comes after Jesus’ teachings against anxiety.²⁷³

Not only are the theological virtues the basis of human freedom, but Niebuhr identifies faith, hope, and love as humanity’s *justitia originalis*.²⁷⁴ The theological virtues are what allow for human freedom, and some aspect of them remains with humans, even

²⁷⁰ While Niebuhr seems to be presenting an argument for human uniqueness based on freedom, I do not think that this would inherently exclude other organisms with similar capabilities.

²⁷¹ Ibid., 271-272.

²⁷² Mark 12:28-33.

²⁷³ Niebuhr, *The Nature and Destiny of Man*, 272. Niebuhr does not cite which texts he is directly referring to. The greatest command appears in all three synoptic gospels, as does Jesus’ appeal to not worry, but these two things are not found in the same chapter together in any of the synoptic gospels.

²⁷⁴ Ibid.

though they are sinful; they serve as a call to what humans should aspire to. In order to identify specifically what original righteousness asks of humans, Niebuhr has to clarify the relationship between natural law and *justitia originalis*. Catholic thought has created a strong division between the two; original righteousness was lost in the fall, but natural justice remained untouched. Niebuhr argues that the lines need to be blurred between the two, and failing to do so simplifies human nature too much. Human freedom is bound up in the creaturely aspects of what it means to be human, and sin can influence human reason, prohibiting *justitia originalis* from being free from the effects of sin.²⁷⁵ Believing that human reason is above the influence of sin allows the law itself to help exercise and spread sin. The way in which this happens is that sin takes something contingent, such as an individual's own circumstances, and universalizes it in reason, contributing to a misunderstanding of what the law requires.²⁷⁶

In order to illustrate the problem, Niebuhr turns to sexual ethics for a concrete example of the complicated relationship between freedom and sin. Niebuhr sees the issue of birth control, and how Catholic natural law prohibits artificial birth control, as the church failing to take into account that reproduction is not the only function of sexual activity. I believe that Niebuhr's assessment is actually an incorrect interpretation of Catholic teaching on birth control. Instead, I read it as saying that the procreative and unitive aspects of human sexuality should not be separated from one another, and so in all sexual activity there needs to be an openness to the procreative aspect. That being said, I do think that the other part of Niebuhr's analysis is correct. He states, "it is the very character of human life that all animal functions are touched by freedom and released into

²⁷⁵ *Ibid.*, 281.

²⁷⁶ *Ibid.*

more complex relationships. This freedom is the basis of both creativity and sin.”²⁷⁷ In other words, the distinction between the two aspects of human nature in Niebuhr’s anthropology is not rigid; it is more like a porous membrane, and the two aspects can affect one another. Human freedom allows for new possibilities for existing biological structures or functions. However, I do think that Niebuhr’s argument focuses too closely on humans. Even in the realm of sexual activity, we see a variety of behaviors in other organisms that go beyond understanding sexual activity as strictly for procreation.²⁷⁸ To understand sexual ethics more fully, one must pay attention to natural law and the insights of original righteousness, and recognize that the two cannot always be separated cleanly.

Another reason to make connections between natural law and original righteousness is that the latter can serve as a corrective or as a goal for which to aim. Humans are both creaturely and spiritual, and freedom allows humans to see additional possibilities. In other words, Niebuhr argues, “there is no moral standard at which the human spirit can find rest short of the standard of ‘faith, hope and love.’”²⁷⁹ The theological virtues represent the highest degree of harmony in relationships. The perfection of the creaturely aspect of human nature rests in the harmony of relationships between self and God, within the self, and self and the rest of creation. Faith, hope, and love embody what proper communion with God is like. All three theological virtues affect all three sets of relationships. Such a view of human nature identifies humans as

²⁷⁷ Ibid.

²⁷⁸ Space does not permit me to go further into this discussion now, but it raises the question again regarding other species and the possibility of sin, as well as freedom. Other primates use sexual activity to bond within the community, uncoupled from the possibility of reproduction.

²⁷⁹ Ibid., 286.

both sinful and also aware that they fail to meet the standard that is central to what it means to be human. The result is that in any given moment, humans are aware, even in their sinful state, that as free beings there is a standard to which they are called, and while this standard is understood as law, it is clear that this law must transcend the particulars of a given historical or social situation. However, knowledge that the law must transcend the particular does not mean that humans have a clear understanding of what the ultimate law requires, nor does it mean that they will be able to achieve these requirements upon learning what they are.²⁸⁰

Law

Law is how the essential nature of humans appeals to individual sinful humans. In order to truly know themselves, people have to understand that they do not live up to the law, and that the law they fail to live up to comes from their essential nature.²⁸¹

Conscience, then, plays at least a starting role in relating humans to their essential nature. The law, then, is not completely external to humans; rather, it is at the center of who they are. This is what Paul is referring to when he says that the law is written on the heart.²⁸²

The problem with this is that the specifics of what the law entails can be misunderstood. Consciences can be misled, and as stated previously, humans are very good at convincing themselves that what is best for them individually is what the group should identify as best, too. Niebuhr argues that even with these concerns, it is possible, in loving community, to identify the universals of the law of human nature.²⁸³

²⁸⁰ Ibid., 288.

²⁸¹ Ibid., 273.

²⁸² Romans 2:14-15.

²⁸³ Niebuhr, *The Nature and Destiny of Man*, 275.

Niebuhr, working from the perfection of the first aspect of human nature, begins to unpack what the requirements of this ultimate law entail. The first part is one's relationship with God. This relationship is more than just following what God wants; it is going above and beyond obedience, transcending obedience, having proper love and trust in God.²⁸⁴ Faith is essential to this because without it, humans are unable to handle their freedom. Hope, faith in the future, does the same. Without these, humans as free, self-transcendent beings are faced with endless possibilities and problems from a contingent world, and the anxiety surrounding these potentialities drives humans to find meaning and security.²⁸⁵ Eliminating anxiety completely from humanity seems impossible. Sin is evidence that anxiety remains, even in people who have faith in God. Humans are self-aware of their anxiety as well as the fact that they should not be anxious, and the only solution is putting trust in God's Providence.²⁸⁶

The second part of the ultimate law is the ordered soul, or proper internal ordering within humans. This is what the call to love God with "all your heart, soul, mind, and strength" means.²⁸⁷ People, as sinners, do not possess this harmony of the ordered soul because people have inordinate desires, or place the good for one aspect of their lives ahead of the whole. Even when people believe that having an ordered soul would be best for them, they still fail to enact it. This is a problem of the will. Niebuhr states, "will is deficient in the specific instance to carry out the transcendent purpose because the motive power of the will in the specific instance is partly furnished by the fears and anxieties of the anxious self; and these fears drive in a different direction from the transcendent

²⁸⁴ Ibid.

²⁸⁵ Ibid., 289.

²⁸⁶ Ibid., 292.

²⁸⁷ Luke 10:27.

general intention.”²⁸⁸ Human anxiety leads them to make themselves the center and end of life, but this does not work because humans transcend themselves. Only God can truly be the center and the end. Humans obey God because they recognize this, but obedience short of love cannot result in an ordered soul.²⁸⁹

The final component of the ultimate law is one’s relationship with the rest of creation. People need to move past their anxiety, remember that they are not the center of life, and that people need one another. When they can move beyond anxiety and self-centeredness, then love for the other can grow.²⁹⁰ Such love, as stated previously, cannot meet its full potential apart from God. Love is the requirement of all the ultimate law, of all forms of law discussed to this point. Love meets the requirements of justice but at the same time dissolves justice, because concern for the other in love goes beyond balancing the needs of self and other found in justice.²⁹¹

Original righteousness provides an argument against an overly negative view of human nature, like total depravity, but Niebuhr also believes the social gospel movement went too far in the other direction; he asserts that living up to the requirements of original righteousness is very difficult. Love, as the highest expression of original righteousness, requires freedom, and while humans are free, it is not an absolute freedom. Additionally, even though humans do have freedom, even if incomplete, they still maintain the legacy of original sin, and even the freedom they have is affected by sin.²⁹² Humans are finite, and the limits they face, including their particular location in space and time, shape how

²⁸⁸ Niebuhr, *The Nature and Destiny of Man*, Niebuhr, 292-293.

²⁸⁹ *Ibid.*, 293.

²⁹⁰ *Ibid.*, 294.

²⁹¹ *Ibid.*, 295.

²⁹² *Ibid.*, 296.

they perceive and weigh their own needs and those of others. Niebuhr seeks to make the distinction between absolute natural law and relative natural law for the same reasons he softened the distinction between natural law and *justitia originalis*. However, he does not believe they can be collapsed completely, and he criticizes utopian thinkers for believing that love can replace justice in history. In a world filled with sin, justice is necessary to coerce people into moving toward the requirements of original righteousness.

Since Niebuhr argues that it is a mistake to imagine an historical period where human perfection existed, it could also be viewed as a mistake, from a Niebuhrian perspective, to look at human biological history for any evidence of human perfection. If original perfection is not chronological—that is, not something found exclusively in humanity’s past and then lost with a historical fall—then evolution may have nothing to contribute to such an understanding. While at first glance this argument has merit, I would argue that there are two reasons why this is not the case.

First of all, placing Niebuhr’s anthropology in dialogue with the natural sciences and the theology and science dialogue requires that we explore the possible connections between them. Regarding the issue of original righteousness, there is consonance between a nonchronological understanding of human perfection and human biological history. The discussion of the prefiguring of evil and sin in physics and biology in chapter two suggests a world where there is suffering and a tendency toward selfishness even before humans evolve. If the argument regarding earlier hominid species and original sin predating modern humans can be supported, then modern humans would have evolved in a world that already had sin. In that case, at least for modern humans, it would not be possible to speak chronologically of an original perfection. Niebuhr’s position on original

righteousness would be supported by such findings because it would reinforce his argument that the fall should be interpreted symbolically and that there is no time in which modern humans were perfect.

The second reason why it is incorrect to dismiss the sciences when looking for insights into human original perfection is that Niebuhr's softening of the distinction between natural law and *justitia originalis* and between absolute natural law and relative natural law makes dialogue with the sciences even more vital. Humans as finite and sinful beings are affected by sin. Total depravity goes too far, but the limits of human nature as well as the effects of sin affect human thought and action. The memory of original righteousness is not only from God, but elements of it are tied to the creaturely aspect of what it means to be human.

While original righteousness cannot be identified in human history, I contend that evolution provides some creaturely anchors for the memory of it. These anchors are not evidence of the attainment of righteousness, but without them I also believe it would not be possible to have memory of it. In other words, it is possible that there are universal contingents relating to original righteousness. For original sin, the anchor was intergroup preference and bias; for original righteousness, they are cooperation and empathy. I argue that cooperation and empathy may not account for all aspects of original righteousness, but they are the necessary conditions for the kind of self-transcendence that is needed in order to have the memory of original righteousness.

Cooperation

Although cooperation is often imagined to be beneficial to all parties, it is not necessarily a positive thing for all involved. There can be an uneven distribution of effort

and reward, and it is easy to see how some can cooperate to the detriment of others in situations of predation, exploitation, oppression, etc. On the other hand, cooperation can lead to benefits for someone at the cost of the one helping. I am not arguing that altruism can be found in humanity's evolutionary past, but I do believe that humans would be incapable of altruism if they did not have certain tools, namely empathy and concern for others. Intergroup preference and bias show that individuals can look beyond their own interests to the interests of others, but most likely with others that are like them in some way. This expansion of the circle of concern, however, does allow for new possibilities in the imagination. Without a history of cooperation, humans would find it more difficult, if not impossible, to have a memory of an original righteousness that required the kind of love Niebuhr describes. The existence of cooperation in evolutionary history does not serve as a defense of humans or other organisms having obtained righteousness, but it can serve as an example of why humans have a memory of original righteousness.

Cooperation is a broad concept, so I will narrow my argument to examine particular kinds of cooperation that I believe have contributed to human development, or kinds of cooperation that could have contributed to it. I will begin with cooperation between species, and how cross-species cooperation can lead to dramatic changes for organisms. Then I will examine cooperation in the context of a species or population, and the affects it can have on the development of characteristics. Following this, I transition to how cooperation could be related to protomorality and morality, which ultimately leads to a discussion of empathy.

Cooperation between Species

Although evolution is historically and overwhelmingly discussed in terms of competition for scarce resources, survival of the fittest, etc., there are other voices that argue that cooperation has played a role in evolution as well, that the story of life as it is known is not as bleak as originally thought. I mentioned endosymbiosis briefly in the previous chapter, but there is more to be said about the theory in the context of cooperation. The theory argues that eukaryotic cells came to be namely through a form of cooperation: one prokaryote began living inside of another. The internal organism received protection from the physical environment or other organisms, and possibly access to food, or new sources of energy. The “host” organism received some additional function provided by the internal organism, such as the metabolizing of something the “host” is unable to process. Eventually, it is believed that the internal organism transferred enough of its genetic material to the other that they ceased to be separate, creating a cell with more internal specialization. The name of this process references the symbiotic relationship in which two organisms interact in ways that benefit both, and the prefix “endo” indicates that it occurs from within.

Two standard examples of endosymbiosis are mitochondria and chloroplasts. Mitochondria are responsible for the production of adenosine tri-phosphate (ATP), the most common source of cellular chemical energy. If endosymbiosis is correct, mitochondria were originally a separate prokaryote that entered into a symbiotic relationship with another organism, with mitochondria becoming part of the other organism over time, providing more efficient energy production. Chloroplasts, organelles that perform photosynthesis, are also believed to have gone through a similar process. Both of these organelles have their own DNA in addition to the nuclear DNA and their

membranes are structured in a way that would be expected from an independent organism.

Endosymbiosis is an old form of cooperation, and one that does not involve the mental processes that humans (and others) possess, but it serves as an early example that competition is not the only choice. Moving beyond the description of how endosymbiosis is believed to have originated, it is possible to reflect on additional meanings. By entering into a symbiotic relationship, two organisms were able to do more than they were capable of on their own. Additionally, this relationship was so successful that it led to a merging of organisms. Over time, the DNA of the internal organism became part of the “host” organism and the two became one. This collapsing of distinction is not a necessary element of cooperation, however. Humans exist in close relationships with other organisms, but this form of cooperation is symbiotic not endosymbiotic.

Niebuhr used the analogy of disease and asserted that anything that reminds humans of the harmony God intends should be viewed as contributing to human health, raising the question of whether something external can contribute to the memory of original righteousness. Looking at human health and cooperation in the natural world, it is important to recognize that bacteria play an important role in human health. In particular, bacteria commonly referred to as “gut flora” are critical in digestion and the immune system. They help break down carbohydrates that humans cannot process on their own, they encourage increased growth of certain intestinal cells, and they help reduce or prohibit the growth of harmful bacteria in the intestines. There is emerging research that gut flora could also be used to help address obesity. Niebuhr would potentially find it important that, in fact, gut flora can influence depression and anxiety.

Gut flora represent a different form of cooperation than endosymbiosis. The bacteria found in humans are still separate organisms, and these organisms can exist in other environments. Prokaryotic cells, like bacteria, are much smaller than eukaryotic cells, such as human cells. The typical human has ten times as many gut flora cells in their body than they do human cells. While gut flora are not a part of human nature, they serve as an example of the benefits of cooperation, including the promotion of health.

Cooperation within a species or population

Cooperation not only occurs between different species, but also between members of the same species. As discussed previously, the problem of free riders, individuals who receive the benefits of cooperation but do not engage in cooperative behavior themselves, complicates cooperation within a population. If those who receive the benefits of cooperation without actually reciprocating are more successful from a reproductive standpoint, it is difficult to imagine cooperation as a lasting strategy. Free riders would be able to devote more energy to reproduction, be it having more offspring or devoting more time to caring for offspring, and over generations there would be fewer cooperators comparatively. Those who cooperate could see the advantage to being a free rider and defect as well. Cooperation, without being able to reign in free riders to a degree, seems to be an unstable strategy.

There are ways, however, to punish free riders. Other birds may choose not to groom a bird again if it did not reciprocate previously. Humans, and other primates, are good at identifying the ingroup and outgroup, and thus social exclusion is a readily available form of punishment. This punishes the free riders and also helps those cooperating because there are fewer individuals with which to share in the fruits of

cooperation.²⁹³ This is even more likely to be the case if the cost of social exclusion of free riders is low, because if it takes little effort for individuals to distance themselves from the free riders, and by doing so they receive a larger share of the benefits, individuals will be very likely to engage in exclusion.

A punishment of this type is a “self-serving” punishment because it benefits the person engaging in the punishing, but most game theory models also have other types of punishment, often where the cost of punishing free riders is high.²⁹⁴ Exclusion as a form of punishment, if the cost of excluding is low enough, can be more successful than costly punishments because the individuals excluding can have a higher return than those who try to receive the benefit of cooperation without contributing.²⁹⁵ This is even more likely if people are always successful in their attempts to exclude. If it was costly to exclude and the odds of actually being able to exclude free riders were low, such a strategy would not work; but if exclusion costs are low and success rates for exclusion are high, then contributing and excluding those who do not will lead to a greater benefit than not contributing and getting excluded.

It can be argued that these results only occur when exclusion is “self-serving,” and exclusion in and of itself does not meet the standard of love that the ultimate law requires. However, I would argue that Niebuhr would never expect every human interaction to live up to the standard of the ultimate law, especially given the nature of sin. His work on individual versus group morality also highlights how unlikely it is that

²⁹³ Tatsuya Sasaki and Satoshi Uchida, “The evolution of cooperation by social exclusion,” *Proceedings of the Royal Society B: Biological Sciences* 280, no. 1752 (December 2012): 20122498.

²⁹⁴ *Ibid.*

²⁹⁵ *Ibid.*

the ultimate law would be enacted in this life, at the societal level. Justice is the best that can be hoped for, and that will also involve the use of power, even coercion. Exclusion as a mechanism of power or coercion, however, could contribute to a community that consistently cooperates and shares the benefits of this cooperation. In such a setting, anxiety would be lower and people would be more open to seeing the other as the ultimate law intends, at least those who cooperate. While cooperation through exclusion seems similar to fairness or justice, and not transcendent love, it could provide a stable environment where people are able to have a stronger memory of original righteousness.

Cooperation and Cognition

Evolutionarily speaking, cooperation has contributed to substantial advantages in the development of higher cognition. There is evidence that cooperation evolved before or coevolved with an increase in quality of the hominid diet. Scholars debate how much meat early hominids ate, but fossilized animal bones show marks of meat removal as far back as 3.4 million years ago, bones with marks from sharp tools two and half million years ago, and dental evidence from hominids consistent with the wear expected from consuming meat two million years ago.²⁹⁶ Researchers have compared hominids to other still existing mammalian carnivores and have identified many similarities between the group structure of pack hunters such as hyenas and large cats with the social structure of primates. Even though these still existing carnivores likely eat more meat than early hominids, scientists believe that they can gain new insights into hominid evolution through comparisons.

²⁹⁶ Jennifer E. Smith et al., "Evolution of Cooperation among Mammalian Carnivores and Its Relevance to Hominin Evolution," *Current Anthropology* 53, no. S6 (December 2012): S437.

Even though most mammals hunt as individuals, cooperation does provide advantages. Cooperation can help protect individuals from predators more effectively, either through early detection or fighting them off, and it allows the cooperating individuals to gain more resources, including hunting larger prey. Cooperation can be problematic, on the other hand, because food is not always readily available, so competition for prey can be substantial, even within the ingroup. The most successful groups, then, are able to split into smaller groups to try to find their own food when there is a shortage, but to recombine when there is abundance.²⁹⁷ These groups tend to be hierarchical, and individuals with the highest status have the most reproductive success. Mothers continue to help their young feed even after they are done nursing by providing access to kills, and nonrelated group members are most likely to allow nonrelated individuals share in a group kill if they spend more time together within the group.²⁹⁸

Smith et al. identify five types of cooperation as points of comparison between theories of human evolution and existing mammalian carnivores. As mentioned already, cooperation takes the form of predator protection, group hunting, “alloparental care,” (caring for nonrelated offspring), forming closer associations within the ingroup, as well as coming together with nonrelated members of the group where there is competition with another group.²⁹⁹ Using these comparison points, they did a phylogenetic comparison with other mammalian species to compare not only cooperation, but physiological changes as well.

²⁹⁷ Ibid., S438.

²⁹⁸ Ibid., S439-440.

²⁹⁹ Ibid., S441.

Cooperation appears to coincide with certain physiological changes. Species that cooperate also had relatively low sexual dimorphism between males and females, larger brains, longer weaning times, and higher shoulders relative to size, all of which are relevant to hominid evolution.³⁰⁰ Increased brain size could have allowed for more complex forms of cooperation to occur, including more complex social structures. Being able to form subgroups that could separate and recombine in multiple ways would promote cooperation and allow hominids to cover more territory, and more or larger prey.³⁰¹ Though the causal relationship is unclear, it is reasonable to assume that cooperation played a role in or coevolved with physiological aspects of hominids that contribute to their mental abilities.

Brain size is not a direct measure of intelligence, however. Just because one species has a larger brain does not necessarily mean it is more intelligent than another species. Neanderthals had a similar sized brain, and possibly larger adult-sized brains than modern humans, but modern humans are believed to be more intelligent. Intelligence can be an evolutionarily expensive trait; the human brain takes far more resources compared to its size than any other part of the body.³⁰² Researchers are using artificial neural networks combined with game theory to examine how brains function and possibly developed. Studies suggest that intelligence is selected for when there is more cooperation.³⁰³ Increases in intelligence, however, lead to differences in the rate of cooperation. Researchers believe this is because intelligence can lead to extremes in

³⁰⁰ Ibid., S445.

³⁰¹ Ibid., S448.

³⁰² Luke McNally, Sam P. Brown, and Andrew L. Jackson, "Cooperation and the evolution of intelligence," *Proceedings of the Royal Society B: Biological Sciences* 279, no. 1740 (June 2012): 3027.

³⁰³ Ibid., 3030.

cooperation, “where this increase in cooperation due to increased intelligence creates further opportunities for intelligent individuals to engage in mutual cooperation.”³⁰⁴ As this happens, the likelihood of a strategy of always cooperating increases, making it also more likely that individuals can take advantage by never cooperating. In other words, intelligence can lead to higher totals in cooperation, but also to increased variability of cooperation.³⁰⁵ Increases in intelligence allow for new ways of acting and help in making appropriate choices when faced with contingent decisions. Intelligence is often linked to kin selection, but these results suggest that cooperation, not just with close relations, is possible and even promoted. Intelligence helps in social interactions, and therefore increasingly complex social structures could place selection pressure on intelligence.³⁰⁶

Cooperation, Protomorality, Morality

Cooperation, discussed thus far, does not constitute morality. Organisms enter into symbiotic relationships, or choose to work with other individuals in their species, because they receive benefits. As the analysis of free riders has explained, it is possible for individuals to try to receive the benefits of cooperation without actually cooperating. Likewise, one of the reasons that social exclusion works as a method to combat the free-rider problem is that there is an incentive to those who are cooperating to exclude free riders; people cooperating receive a larger portion of the fruits of cooperation if they can successfully exclude free riders. None of this behavior measures up to the ideal that Niebuhr posits in the memory of original righteousness, though I argue that humans would be incapable of having memory of original righteousness without such behavior.

³⁰⁴ Ibid., 3031.

³⁰⁵ Ibid., 3032.

³⁰⁶ Ibid., 3034.

Cooperation is a necessary but insufficient element of humanity's memory of original righteousness. Further attention must be given to sociobiologists and to research being done on the evolution of morality, including animal behaviorists who identify aspects of morality or "protomorality" in other species.

According to sociobiologists, cooperation likely originated between closely related individuals. Parents give more attention and care to their offspring than to others, but this preference (or even bias) can apply to other related organisms as well. The terms used to describe this behavior are "kin selection" and "inclusive fitness." My brother married and had a child with his wife while I have been working on my degree. If I contribute to the nurturing of my niece, and if my level of contribution is such that I am more attentive to her development than I am to having my own children, I am engaging in kin selection.

This could be seen as a failure in terms of reproductive success, but inclusive fitness argues that this is not the case. Two biological siblings have the same parents and each parent has two alleles for each gene, so biological siblings share fifty percent of their genetic material. If one sibling does not have children and the other one does, the former shares twenty-five percent of their genetic material with their sibling's child. Parents are each only related fifty percent to their children, so the theory behind inclusive fitness is that for individuals who are closely related, contributing to the rearing of family children is passing along one's genes, at least some of them, to the next generation. Thus, the reproductive fitness of an organism can include the offspring of closely related individuals. Generally it would be expected to see kin selection occur between closely

related organisms, so the less related two individuals are, the less likely it is that this kind of behavior would occur.

Although it is less likely that an individual would help a distantly related individual or nonrelative, it still happens, and there are explanations for such behavior. The study looking at mammalian predators showed that nonrelatives will cooperate in sharing kills, and in this case, the chance of cooperation is linked to familiarity and status. If an individual had spent more time with a nonrelated individual, the likelihood of sharing increased. Sharing in the rearing of children or sharing of kills among predators are examples of altruism. Altruism can be defined many ways, but the definition used most frequently in terms of biological altruism is providing a benefit to another organism at one's own expense. The problem is that the definition of altruism used in the sciences is often different from the definitions used in the humanities. Altruism infers, if not explicitly appeals to, selflessness in philosophy and theology. It is treated as the kind of standard Niebuhr points to in the ultimate law and many question whether altruism as pure selflessness is even possible. Biological altruism, on the other hand, is not necessarily selfless at all. Helping a sibling raise their offspring is an example of altruism because it is providing a benefit to another organism at the first's expense. This kind of altruism can also be seen as self-serving because of inclusive fitness. While an individual may be expending resources raising another's child, if the child is closely related, they are still receiving some reproductive fitness. But even if inclusive fitness is not applicable, if the two individuals are distantly related or nonrelatives, sociobiologists and evolutionary psychologists still give an account of why this happens.

An individual organism could choose to act altruistically toward an unrelated organism and still be serving its own interests. An individual may provide help to another with the expectation that the helped individual will in turn assist the helper. This is what biologists refer to as reciprocal altruism. Acting at a specific time and place is a cost, but it is presumed that someone else will reciprocate when it is needed. Grooming, as in Dawkins' example of birds, is a case in point. There have also been studies on reciprocal altruism and primate grooming. Some scholars argue strongly that it exists, while others say the results cannot be replicated. Possibly because of the free-rider problem, those who argue the evidence is convincing enough say that primates are more likely to groom primates who have groomed them. A meta-analysis examined studies involving grooming and assisting an individual when they are in a conflict, identified as agonistic support. Scholars believe that grooming an individual makes them more likely to provide agonistic support, and according to the meta-analysis, this seems to be the case.³⁰⁷

Altruism that is not in some way self-serving would seem to be rare, or according to some, impossible. Some scientists argue that selection acts on groups rather than individuals, and in such a paradigm, with the unit of selection being the group, individuals could act sacrificially for the survival of the group.³⁰⁸ However, I do not think that appealing to group selection will provide an answer in all cases. Vampire bats were a textbook example of reciprocal altruism. The argument was that bats would share blood meals with one another because nourishment is more important than grooming. Sharing blood when an individual has the means makes it more likely that other bats will share

³⁰⁷ G. Schino, "Grooming and agonistic support: a meta-analysis of primate reciprocal altruism," *Behavioral Ecology* 18, no. 1 (September 2006): 118.

³⁰⁸ Stephen Garrard Post, *Unlimited Love: Altruism, Compassion, and Service* (Philadelphia: Templeton Foundation Press, 2003), 86-87.

with them when they are unsuccessful in obtaining a meal. It turns out, however, that kin selection does play a role in this process, and so it is neither simply kin altruism nor reciprocal altruism.³⁰⁹ If all the members of the group were related, then kin altruism and group selection should lead to sharing, but reciprocity and status play roles as well, so there is not a single explanation. Mammalian carnivores also showed a willingness for altruism with group members who were more familiar, through time spent together and not relation. If group selection was a motivator for group members to look to the survival of the group and not individual survival, I think it would be more likely that altruism would be directed in a hierarchical manner or to individuals who could give the greatest benefit to the group, but this is not the case.

Thus far, I have explored cooperation and biological altruism apart from questions of morality. Cooperation can lead to benefits within the group, but the cost to other groups or individuals could be damaging or even life ending. It is possible for these kinds of interactions and relationships to expand concern beyond the self to include others, even in some limited way, but this is insufficient for the kind of memory of original righteousness that Niebuhr is positing. Genuine care and concern for others is also needed. The question is whether there is something in humanity's biological history that contributes to concern for others, and I would argue that there is ample evidence that this is the case.

The most obvious place to begin the search for a biological predisposition toward concern for others would be to return to familial relations. The discussion of kin selection made it clear that caring for closely related kin's children can be beneficial, but there is a

³⁰⁹ Gerald S. Wilkinson, "Reciprocal food sharing in the vampire bat," *Nature* 308, no. 5955 (March 1984): 184.

different relationship that is more helpful in this discussion; the relationship of parents to their children is central to the question at hand. Parenting in evolution takes many shapes and forms. Some organisms have one or both parents who die in the process of reproduction, and others have neither or only one of the parents involved in child rearing. There are other species, however, that have two parents and extended family involved in the process, and with mammalian carnivores it was clear that the length of weaning was extended, thus caring for children became a larger investment.

The extension of care is even more pronounced with the evolution of bipedalism. Walking upright changes the physiology of the birth canal, complicating childbirth. The problem is compounded because higher intelligence tended to accompany bipedalism, requiring a larger cranium for a larger brain.³¹⁰ In order to accommodate larger sized heads and a narrowing birth canal, mothers had to give birth sooner. The result is that these children are dependent on others for a longer period of time after birth, with that burden usually falling on the parents.³¹¹

The sociobiologists would say that in such a situation, there would be selective pressure for parents to be highly invested in the welfare of their children. Instead of reproductive success coming from having many children with little post-birth investment from parents, bipedal mammals have fewer children and have a high post-birth investment in them. In other words, having children requires a great deal of time and resources, so parents need to develop a strong connection to them in order to protect and nurture them. If a reproductive pair has ten children at once and something happens to

³¹⁰ This is an over simplification. As stated previously, a larger brain does not necessarily mean more intelligence. That being said, there seems to be an increase in the ratio of brain to body size in primates to hominids to modern humans.

³¹¹ Post, *Unlimited Love*, 95.

one or two of the children, such as disease or being taken by a predator, there are other children who will live and contribute to the next generation. If a reproductive pair has only one or two children at once and something happens to them, there is a much greater loss, evolutionarily speaking. Parents grew to love their children, to protect and defend them, and this affection became instinctual. It would not be surprising, therefore, to see why parents might sacrifice themselves in order to save their children.

Although such a description of parental love sounds cold, calculating, and deterministic, it need not be reductionist. It is helpful in attempting to explain how biological changes could lead to changes in behavior between individuals, but it cannot explain everything regarding the love that parents have for their children. Scholars who believe that “pure” altruism is not possible, even in humans, may dismiss this example, claiming that there is nothing new here. Parents could sacrifice themselves because they are fifty percent related to their children, or because such behavior is expected of them and to fail to act that way would invite judgment or punishment from others.

For the project at hand, however, I believe the argument has taken a step forward. Sin is a disruption of the harmony of relationships; one turns away from God and others toward one’s own wants and needs. While acting for the benefit of one’s children may be inclusive fitness, it is also care for another individual, wanting what is good for someone else out of love. There are emotion and intent that were not there previously.

Qualitatively, the relationship between parents and their children is different than it is for

two nonrelated individuals. Thomas Aquinas believes this to be the case as well; he says that it is natural and acceptable to treat one's own children preferentially.³¹²

Cooperation, generally speaking, expanded the circle of concern to include others, but not necessarily as more than an afterthought. Love may not expand the circle of concern any farther; it may still only apply to close relatives or within a given ingroup, but it certainly raises the importance of the other in the interaction. Stephen Post argues that if people want to provide an argument for "pure" altruism, they "must be particularly concerned with its roots in kinship (especially on the parent-child axis) and the malleability of this motivational capacity to wider social circumstances of nonkin, especially through the influence of culture, religion, and spirituality."³¹³ In other words, familial love provides another anchor point for original righteousness, but it is still not the entire answer. The circle of concern is a circle; it is not a single point but includes actual others, and it truly is about concern, not simply how others can be useful.

While sociobiologists look for evolutionary explanations for behaviors that seem to go against what would be expected, there are a number of researchers looking to other animal life on earth and the possible connections it could have to the evolution of morality. Frans de Waal is a primatologist who argues that primates do have a sense of morality, though it is not as complex as human understandings of it. De Waal embraces the social nature of humans, arguing that the social-contract theorists fail to understand that humans evolved as social animals, and did not choose to cooperate only to overcome

³¹² Thomas Aquinas, *Summa Theologica*. II.II. Q. 26 A 8

<http://www.newadvent.org/summa/>

³¹³ Post, *Unlimited Love*, 94.

unbearable suffering.³¹⁴ Humans are better than some scientists would lead people to believe. Those who present humans as selfish to the core and only cooperating when there is direct benefit are said to ascribe to the Veneer Theory, according to de Waal. As it sounds, the Veneer Theory suggests that morality is only a thin veneer surrounding a selfish core of human nature.³¹⁵ De Waal believes that goodness is a characteristic that humans highly value, and that human biological history offers part of the reason why.

Cooperation is not anti-evolution, de Wall argues, because time is a factor that is often overlooked. It is not surprising that cooperation, even biologically altruistic behavior, could persist and even be selected for, if the individuals cooperating achieve greater overall benefit than they could have on their own. As I have reiterated throughout this discussion, such understandings of cooperation do not abandon selfishness. If the chances of survival and flourishing are higher when working together, then it is not surprising that organisms would choose to do so. In this context, there was an increase in parental care toward their young, and this allowed for unintended consequences.

De Wall asserts that even Darwin understood that human emotions were closely related to those of other organisms and that emotions such as sympathy likely originated in the parent-and-child relationship. Sympathy was useful in group interactions because it increased the likelihood of reciprocity, but “the impulse became divorced from the consequences that shaped its evolution. This permitted its expression even when payoffs were unlikely, such as when strangers were beneficiaries. This brings animal altruism

³¹⁴ F B M de Waal, *Primates and Philosophers: How Morality Evolved*, ed. Stephen Macedo, Josiah Ober, and Robert Wright, The University Center for Human Values Series (Princeton, N.J.: Princeton University Press, 2006), 4.

³¹⁵ *Ibid.*, 9-11.

much closer to that of humans than usually thought.”³¹⁶ Such an understanding is not anti-evolution; in fact, this is a development that is in line with evolutionary thinking. A process or characteristic serves a particular purpose, but over time the characteristic or process could be used in new ways that are completely unrelated to its origin and early selection.

Emotions play a crucial role in primate communication. If the emotions of one organism can create the same feeling in another, scientists refer to this as emotional contagion. Empathy would not have evolved without emotional contagion, and de Waal has seen evidence of other primates possessing empathy in his own work.³¹⁷ Studies have also provided examples of rats and rhesus monkeys changing their behavior in response to the pain of another individual. By doing a motion such as pushing a lever, the first organism would receive food but another would receive an electric shock. In response to seeing another animal shocked, both rats and rhesus monkeys stopped the action that brings food, sometimes for an extended period of time.³¹⁸ In such examples, it seems that empathy allows these organisms to know how the shocked one feels and they choose to act against their own interest in order to avoid causing more discomfort to the other.

Empathy

Building on the work of emotional contagion in general can be useful, but a further step would be to recognize the mental states of others, including their desires and goals. Though some refer to this as “cognitive empathy,” the term “theory of mind” is more commonplace. There is disagreement over whether humans are the only species to

³¹⁶ Ibid., 15.

³¹⁷ Ibid., 27.

³¹⁸ Ibid., 29.

have theory of mind, but I am convinced that primates possess it as well. Biologist and theologian Oliver Putz draws upon the findings of experimental scientists to present the case that apes have theory of mind. Experiments show that apes possess an awareness of where other organisms are looking and knowing what others can see. For example, if food is placed in plain sight of two chimpanzees, but another piece of food is put in a place where only one of them can see it, the chimpanzee that can see both food sources will choose the hidden one if the other chimpanzee is of higher status, in order to avoid conflict over the one both can see.³¹⁹ Putz goes on to argue that mirror self-recognition tests prove that apes possess self-consciousness, because the individual sees an organism in the mirror and understands that the reflection is an external symbol of the internal self. This also allows the individual to recognize other organisms as external symbols of their own internal selves.³²⁰ And if an individual can recognize another as a self and has an awareness of its mental states, it is possible to take the perspective of another individual.

Theory of mind allows an organism to take the perspective of another, which is essential to self-transcendence. This is likely the most direct overlap between the two aspects of human nature according to Niebuhr. The free, self-transcendent aspect requires theory of mind in order to exist. Humans would not be capable of transcending themselves if they were unable to take on the perspective of another and realize that the other has needs, wants, desires, fears, etc., just as they do. Taking the perspective of another is the first step of self-transcendence and contributes to the ability to understand

³¹⁹ Oliver Putz, "Moral Apes, Human Uniqueness, and the Image of God," *Zygon* 44, no. 3 (September 2009): 617.

³²⁰ *Ibid*, 618-619.

that one is finite and exists in a finite world. The kind of love Niebuhr posits in the ultimate law would be impossible without theory of mind.

Original Righteousness and Original Sin

Cooperation and empathy provide a necessary but insufficient foundation for human self-transcendence, but any discussion of original righteousness cannot be separated from original sin. I argue that these concepts are interrelated so closely that one must always be understood in light of the other. Because original righteousness, or the memory of original righteousness, is not the attainment of righteousness, it is still open to the influence of sin and original sin. Even the biological anchors that connect human biological history to original righteousness are affected by sin. As I have repeatedly stated, cooperation in and of itself is not necessarily moral. There is ample evidence of human experience that points to how cooperation can be used to perpetrate great evil. Cooperation may have served particular purposes in history, but in an evolutionary world, characteristics can be decoupled from their original intentions and be applied in novel ways. Cooperation and empathy both can be affected by sin and original sin.

Niebuhr argues that the specification of the content of the law must be practiced in community, but original sin shapes how people conceive of and construct community. Finding the underpinnings of original sin in intergroup bias problematizes the decisions of who is included in a community and what is the proper relationship of the community and its members to other people and groups. Likewise, empathy can be affected or shaped by sin and original sin. Concern for those who are closely related to an individual, or members of the community with which they interact more frequently, can be overemphasized. Individuals in a contingent world can look to their own needs and

desires, but concern for others can lead people to act in ways that not only secure their own needs at the expense of others, but also the needs of those for whom they care. It could cause individuals to try and get around the responsibilities of cooperation as well, to become free riders, or to pass along the benefits of free riding to their kin. Clearly, in the context of intergroup bias, concern for one's ingroup can be shaped in ways that vilify the outgroup and lead to interacting immorally with those not in the ingroup. These questions are even more important in the context of virtue ethics. In the next chapter, I expand on how I think the natural sciences and the theology and science dialogue challenge traditional virtue ethics on the matter of friendship, but in dialogue with Niebuhr's anthropology they also provide productive ways of reforming how virtue ethics utilizes friendship.

In this chapter I have focused on how original sin can affect one's understanding of original righteousness; but to complicate things further, I also argue that original sin would not have existed without original righteousness. Intergroup preference and bias would not be feasible if humans were not social organisms who cooperate with other organisms. Concern for others, especially kin or close group members, provides the basis for intergroup preference. The expansion of the circle of concern beyond the individual to one's offspring created a bond that can be applied to other forms of interaction. It is a small step from loving one's offspring to caring for one's extended family. In social groups, preference could be given to kin above other members of the group, even members of higher status, which could lead to the splintering of a group.

Again, intergroup preference in and of itself is not negative. Earlier in this chapter I called on Thomas Aquinas to support the notion that preferential care for those who are

similar, or related, makes sense, is natural, and is not immoral. However, when intergroup preference becomes intergroup bias is when the problems arise. Empathy allows for the vilification of the outgroup and can increase the effectiveness of the means of social exclusion. Being able to take the perspective of another allows members of a group to share an understanding of what kind of behavior is expected of the ingroup, and what ways of excluding people from the group would result in a sense of loss of community.

Original righteousness and original sin are bound together in the creaturely aspect of human nature, but they are also linked in Niebuhr's understanding of the ultimate law and the perfection of human nature. The ultimate law, I would argue, is the perfection of the creaturely aspect of human nature in light of the perfection of the transcendent aspect of human nature. In other words, the ultimate law is about the harmony of relationships between God and self, within the self, and between self and the rest of creation, informed by the theological virtues. Though one could collapse all of this to the concept of life, I believe that it is more complicated than that. It takes reflecting on the nature of one's relationships, of thinking how they might be affected by one's own anxiety and bias, and continuing to compare one's actions and relationships to the ultimate standard of faith, hope, and love. This is a task that humans cannot do by themselves, individually or communally. It requires God and the grace of God to accomplish what humans cannot do on their own.

This chapter identifies elements of the creaturely aspect of human nature that can contribute to Niebuhr's understanding of the memory of original righteousness. Without a historical time of perfection to look to, humans nonetheless possess knowledge that

things are not the way they should be and that they are called to a higher standard. Humans are social and symbiotic; their existence is bound together with the rest of creation, and this is true even in their physiology. Cooperation, even if it served purely selfish purposes, was helpful for survival but also allowed for the possibility to expand the circle of concern to others. That the circle expands first to close relatives is not surprising, but even that expansion creates room for concern for others to be exercised in new and different ways. With the development of empathy, sympathy, and theory of mind, organisms are able to imagine what it is like for others and to act in ways that avoid harming others, or even end up helping them. The creaturely aspect of Niebuhr's anthropology is indebted to evolution in terms of generating certain capacities, but the memory of original righteousness cannot be solely dependent upon biology.

The memory of original righteousness would be impossible without the grace of God. God gifts humanity in numerous ways. God calls creation itself good and humans would not exist without a creation, nor would they be the species they are now if life had not evolved the way it did. Niebuhr also presents the perfection of the creaturely aspect of human nature as natural law, so God provides grace through the act of creation, but also through nature itself. The perfection of human nature is humanity's *telos*. Within human nature itself, then, also exists the grace of God. Reason allows humans to see God's will in nature, in revelation, and reflection. While original sin does not destroy humanity's knowledge of the good, it does create pitfalls that need to be avoided. Niebuhr argues that individual humans on their own cannot specify the content of law; specification has to be done in community in order to keep individuals from self-deception. In my estimation,

however, Niebuhr's stipulation of specification in community does not go far enough, and in the next chapter I will address this shortcoming.

It is clear that God also desires to be in relationship with creation, and while God creates and sustains, the kind of relationship that creation is capable of changes when self-transcendence evolves. Now there is life that can understand its own selfhood, the selfhood of others, and the finitude of creation. Karl Rahner speaks of grace as God's self-communication to the world.³²¹ Self-transcendence allows organisms to respond to God's self-communication, making the choice of whether to accept it or not. Rahner stresses that this choice must be free. Freedom is an essential aspect of human nature, even though it contributes to suffering in the world.

Even though freedom is necessary for humans to choose how to respond to God's self-communication, this freedom also allows for action contrary to nature. Original righteousness may serve as a reminder of what God expects of humanity, but humans still sin. Thus far, the discussion has centered on Niebuhr's anthropology and how it can be informed by the sciences and the theology and science dialogue. In order to see clearly the affect that these insights have on a Niebuhrian perspective, I will now look to specific issues in ethics and argue that a scientifically informed theological anthropology presents new challenges and insights.

³²¹ Karl Rahner, *Foundations of Christian Faith: An Introduction to the Idea of Christianity*, A Crossroad Paperback (New York: Crossroad, 1982, 1978), 190.

Chapter 4: Making a Difference: Anthropology in Action

Insights from the natural sciences and from the theology and science dialogue have fleshed out and adjusted Niebuhr's understanding of original sin and original righteousness. These changes in turn affect theological ethics that incorporate his anthropology. This final chapter will examine one ethical method and two ethical issues and how Niebuhr's modified anthropology necessitates changes. I categorize Niebuhr's understanding of natural law in a virtue ethics framework, and the work of the previous chapters has ramifications for how virtue ethics envisions the virtuous mean and problematizes the role of friendship. The first ethical issue examined will be environmental ethics. The harmony of relationships Niebuhr argues for in his definition of the perfection of the creaturely aspect of human nature clearly can provide an additional perspective and motivation regarding environmental issues. Additionally, some of the insights regarding friendship in virtue ethics can be used in the context of human relationships with other animals. The final issue to be examined is genetic engineering. While it is clear that the sciences can inform philosophical and theological understandings of anthropology, genetic engineering complicates the conversation further by allowing for science, or the application of science, to change the biological nature of organisms, including humans.

Virtue Ethics

The Virtuous Mean

The insights regarding the nature of original sin and original righteousness from the sciences and the theology and science dialogue can help sharpen virtue ethics' understanding of the virtuous mean. For Aristotle, the moral virtues are stable states of

character brought about through habituation. In order for a person to become more just they must act in just ways repeatedly, and continue to do so, because though they are stable, virtues can atrophy like muscles. A particular virtue, such as temperance, is the mean between an excess and a deficiency. In the first chapter, this was described in relationship to the feminist critique of Niebuhr's anthropology. Self-abrogation would be a deficiency of sense of self, giving up one's self, whereas an excess of self would place too much importance on the self. The mean exists between these two, but this mean is not arithmetic. Aristotle is not suggesting the use of a number line where cowardice is zero and recklessness is ten with courage as five. The concept of virtues as a mean is much more flexible. The mean is individual; what is courageous for one person may not be courageous at all for another.³²² Such an understanding is complimented by biological human nature. Humans are shaped by their genes, but they are not determined completely by them, and genes and environment can shape individual's dispositions. People must use prudence and reason to determine their individual mean.

Aristotle's Rules for Determining the Mean

Aristotle also provides additional guidelines for determining the mean. The first is that determining the exact mean and being able to achieve it is very difficult. Therefore, people should overestimate in the direction of the excess or deficiency that is less harmful.³²³ With the virtue of temperance, for example, it is less harmful to have an excess of control regarding the indulging of pleasure than a deficiency, so people should aim to be closer to the excess. People must also be self-aware and have knowledge of the

³²² Aristotle, *Nicomachean Ethics*, 2nd ed. (Indianapolis, IN: Hackett Publishing Company, Inc., 1999), 25.

³²³ *Ibid*, 29.

kinds of things to which they are drawn. If someone avoids conflict at all costs, then he or she needs to envision the mean being in the opposite direction.³²⁴ Finally, Aristotle argues that pleasure is problematic for everyone. People are drawn to it and avoid pain, and this permeates human reason. This leaning toward pleasure can be seen a predisposition and so people must always suspect that their estimation is failing to take this into account and adjust accordingly.³²⁵

Niebuhr's Anthropology Adds a Fourth Rule: Taking into Account the Barycenter

I believe that in light of Niebuhr's anthropology it is instructive to include an additional rule when determining the mean, taking account for the barycenter. Imagine that for any given virtue the excess and deficiency are spheres, such as the Earth and the sun. The barycenter is the center of mass of the two objects, and so in the case of the Earth and the sun, the barycenter is the point around which both objects actually orbit. This would be the mean, where the masses of the two objects are balanced, but I would argue that the barycenter cannot be the virtuous mean. Instead, it emphasizes Aristotle's rules but also represents more clearly the difficulty in approximating and achieving the virtuous mean.

Aristotle acknowledges that people often have a natural tendency toward either the excess or deficiency of a given virtue, so in order to illustrate the importance of accounting for the barycenter, gravity can be a metaphor for this natural tendency. The virtue of temperance will provide the most pronounced example, since everyone has a strong tendency towards pleasure and avoiding pain. If one imagines the deficiency of

³²⁴ Ibid.

³²⁵ Ibid.

temperance, intemperance, is the sun and the excess of temperance is the Earth, then calculating the barycenter shows where the gravitational forces balance one another. The barycenter of the sun and the Earth lies within the interior of sun; the Earth only moves the center of mass slightly. The center of mass cannot be the virtuous mean in such an example, because it would lie far too close to the deficiency of temperance.

Taking into account the barycenter reinforces Aristotle's rules for determining the mean and further illustrates the difficulty of achieving the mean. Clearly, if the center of mass is still within the sun of intemperance, than the virtuous mean must be overestimated toward the Earth of excess temperance. The second rule is being aware of their tendencies, in this case the tendency toward pleasure, means that people need to overestimate the virtuous mean even more toward Earth. This is compounded by the third rule; if all humans are drawn towards pleasure, the virtuous mean needs to be even closer to Earth than the sun. Attention to the barycenter additionally shows that more effort than anticipated is needed to achieve the virtuous mean when it is identified or estimated. In order to move away from an excess or a deficiency, one must fight the gravitational pull of that excess or deficiency and maintain some resistance against that pull in order achieve a stable state. It is not just identifying the virtuous mean, but also determining the effort needed to achieve the mean, and taking into account the barycenter improves both of these estimates.

Niebuhr's Anthropology Edits Aristotle's Rules for Determining the Mean

Niebuhr's anthropology in light of the sciences and the theology and science dialogue requires not only adding a new rule, taking the barycenter into account, but also amending the existing rules in light of original sin. The barycenter was an additional rule

because it affected all three of Aristotle's rules by order of magnitude, whereas insights from original sin specifically only provides the additional of another type of concern to the rules. This additional concern is the tendency of people to look to their own their own needs, including intergroup bias. Like pleasure, there is a natural tendency to turn toward the self or the ingroup. In order to see how this assertion modifies Aristotle's rules, it is instructive to look at a concrete example, the virtue of justice.

Justice, as a virtue focused on what is owed to others, provides a clear illustration as to how original sin affects Aristotle's rules for determining the mean. The excess and deficiency of justice would be complete selfishness and self-abrogation. Aristotle's first rule for determining the mean is complex in the context of justice, because as the feminist critique of Niebuhr's account of sin highlights, women are often asked to put others ahead of themselves and this can have negatives consequences. Human biological history, however, has created a predisposition toward selfishness though, even in people who are asked to self-sacrifice. In determining whether the excess or deficiency is more harmful, it is essential to reflect on one's privilege. The greater the privilege the more harmful selfishness would be, and the less privilege one has, the more harmful self-abrogation would be.

There is considerable overlap between Aristotle's first and second rules in the discussion of the feminist critique of sin and justice. Aristotle calls for self-awareness in order to know whether one will be drawn toward the excess or deficiency. Self-awareness, as mentioned in the first chapter, requires a self, and so in the context of virtue ethics, self-abrogation is never an option. That being said, self-awareness also asks that people acknowledge there are ways in which they can be selfish, even

unintentionally. This is where intergroup bias plays a role. Within feminism there was criticism that when people would speak about women and how woman are marginalized, the discussion focused on white women. Womanist thought emerged as one example of trying to identify the complexity of circumstances that contribute to oppression. Self-awareness of their tendencies can help people realize that they are not only drawn to certain experiences but also to relationships with certain people. This insight is profound enough for virtue ethics that discussion of it requires its own section, but for now it will suffice to say that knowing that one is drawn to certain people can help identify where one needs to overestimate the mean in regards to what is owed others, especially others not in the ingroup.

The connection to Aristotle's third rule should be clear by now; like pleasure, intergroup bias is a tendency of all humans, so it should be added to pleasure as something to take into account at all times. Acknowledging intergroup bias in the context of justice means realizing that one might be overestimating what people close to them or similar to them biologically, geographically, ideologically, etc. deserve and underestimating their obligations to those in the outgroup, but intergroup bias affects other things as well. Aristotle views generosity as a virtue; albeit a virtue closely related to justice, and having intergroup bias as something to check for in moral deliberation would be helpful. Most importantly for virtue ethics, however, is the fact that friendship plays a major role in the acquisition of virtue, and so intergroup bias can affect moral development and place additional limitations on the moral imagination, and so attention must now be given to Niebuhr's anthropology and friendship.

Friendship

Aristotle reinforces the social nature of humanity and insists that friendship is necessary for every person, though why friendship is needed may differ based on circumstances. Friendship, generally speaking for Aristotle, is a broad term. At its most basic, Aristotle sees friendship as goodwill that is shared between two individuals, where both individuals are aware of it.³²⁶ All members of a species, but especially humans, possess what he calls “a natural friendship.”³²⁷ It seems that friendship even has ties to Niebuhr’s understanding of love going beyond justice. Society, Aristotle says, should endeavor to foster friendship amongst people because just people need friends, but friends do not need justice to govern their relationship.³²⁸ Recognizing that there was no consensus in his time regarding whether similar people are friends or whether such similarity breeds conflict, Aristotle leaves such questions to the natural sciences. As the previous discussion shows, the natural sciences are rather clear that humans tend toward friendships with people that are similar, or in the ingroup, and these similarities can be based on a wide variety of things. This point is important because even though Aristotle tries to avoid the argument over similarity, a more detailed account of his understanding of friendship reveals he is unsuccessful.

Aristotle’s Typology of Friendship

There are three forms of friendship for Aristotle, friendships of pleasure, friendships of utility, and genuine friendship. Each of these forms has a different object of love. In friendships of utility, for example, the object of love is not the good of the

³²⁶ Ibid, 121.

³²⁷ Ibid, 119.

³²⁸ Ibid, 120.

other person, but rather for the benefit they obtain from the other person.³²⁹ Likewise, the object of love in friendships of pleasure is not the other, but the pleasure one receives from the company of the other. Genuine friendships have an object of love. For genuine friendships the object of love is the good, specifically the good for the other person.³³⁰ Aristotle argues that there is significant difference of nature and quality between genuine friendship and the other forms, so genuine friendships must be treated separately, after a brief explanation of the relevant features of the other forms.

Friendships of utility and pleasure are more similar to each other than they are to genuine friendship because they are closer to Niebuhr's understanding of original sin than original righteousness. The object of love is focused on the individual, and not the other. By nature humans are social and desire connection, but they also are predisposed to look toward their own self-interest, so it should not be surprising that this is reflected in some forms of human friendship. Friendships of utility and pleasure are transient in nature. For example, a person may prefer shopping at a particular store, but if another store offers a better deal, that person can take his or her business to the second store. If a friendship provides less utility or pleasure than it used to, a person can look elsewhere to have those needs met. Social networking may be a highly identifiable symbol of this; status is sometimes attributed to the size of one's network, but it is also very easy to add and remove friends/followers/connections.

Just as these forms of friendship exhibit behavior associated with original sin, they also fit into the discussion of intergroup preference and bias. Humans, and it would

³²⁹ Ibid, 121.

³³⁰ Ibid, 125.

seem at least some other primates, are capable of defining an ingroup based on arbitrary, nonbiological factors. Aiding in survival and reproduction may have been the dominant or only definition of utility in evolutionary history, but humans have diversified the concept of utility considerably. Of course, utility can still mean providing support to biological survival and reproduction, but there can also be economic utility, in terms of making or saving money, intellectual utility, and utility in reaching a particular goal, whether it is political, artistic, athletic, or something else. Even though these friendships may be mostly self-serving, even self-serving cooperation has benefitted the species through its history.

Friendships of utility and pleasure may compose the vast majority of human friendships according to Aristotle, but he also argues that these friendships play a marginal role in the moral life. These friendships will receive additional attention when friendship is reexamined in the context of environmental ethics, because the insights gained from placing genuine friendship into dialogue with the discussion of original sin and original righteousness have implications for how humans address relationships with other humans and the rest of creation. For now it is important to note that even though friendships of utility and pleasure are more similar to one another than they are to genuine friendships, Aristotle does acknowledge that friendships of pleasure are closer to genuine friendships than friendships of utility are. The reason for this is that the people involved in friendships of pleasure receive the same thing from one another, which may not be the case in friendships of utility.³³¹ Additionally, younger people are more likely

³³¹ Ibid, 126.

to have more friendships of pleasure, for reasons which I think will become apparent in the discussion of genuine friendship.

Genuine Friendships

Aristotle has strict guidelines as to which persons can have genuine friendships with one another. The first restriction is that genuine friendship can only occur between two good people that possess similar virtue.³³² It is at this point where Aristotle takes a strong stand in the debate over whether friendship requires similarity. While similarities are not necessary for the other two kinds of friendships, Aristotle argues that similarity must exist in genuine friendships. People without virtue would be incapable of willing the good for the other for their own sake.

While friendships of pleasure or utility may be abundant, Aristotle claims that genuine friendships are rare and are far more enduring than the other kinds. Genuine friendships require time; one may feel friendly to another, but it takes getting to know someone enough to develop the needed affection and trust in order for a friendship to become genuine.³³³ Not only does it take time, but Aristotle goes further to say that it requires proximity as well. Genuine friendship needs activity together. Physical separation over time can erode the friendship. Aristotle even makes the claim that genuine friendship has to involve living together.³³⁴ These stipulations help clarify why genuine friendships would be so rare.

³³² Ibid, 122.

³³³ Ibid, 123.

³³⁴ Ibid, 124-125.

Genuine friendship also occurs between equals. While Aristotle does discuss friendships between unequals, it is clear that because of the inequality, he sees the parties involved as seeking different things and introduced the notion of proportionality in regards to love.³³⁵ According to his own argument then, friendships of pleasure would be more similar to genuine friendship than friendships between unequals, since friendships of pleasure seek and receive the same from the involved parties. I would argue, therefore, that Aristotle does in fact take a position in the very debate he tries to avoid regarding equality and friendship. Although he suggests letting science examine the issue, he decides that at least some forms of friendship require equality. In light of the insights from science discussed so far, I would argue that he has taken the incorrect position.

A third requirement of genuine friendship for Aristotle is character. Genuine friendships can only occur between people who are good. Good character is needed in order to will the good in the other for the sake of the other, so while a virtuous person may desire the good for a non-virtuous person, the latter is incapable of willing the good for the former. People who engage in genuine friendships share in common activities and therefore people of good character act in ways that uphold that character when they are together. But even amongst the virtuous, the number of genuine friendships is still small. Even if an entire neighborhood or city were comprised of virtuous people, Aristotle still maintains that genuine friendships should never exceed the number of people who can live together and share their lives together.³³⁶

³³⁵ Ibid, 127.

³³⁶ Ibid, 151.

Friendship and Ingroup Myopia: Revising Aristotle in Light of Niebuhr and

Science

I contend that Aristotle's conditions for genuine friendships are too restrictive and ultimately cause methodological problems for virtue ethics. If people only engage in conversation regarding the moral life with people in their ideological ingroup, then at the very least they will have a skewed understanding of the virtuous mean for justice.

Friendships of pleasure and utility can provide experience of people in the outgroup, but this is insufficient to understand what is owed to others in a moral sense. Genuine friendships for Aristotle exacerbate this problem since he posits that these kinds of friendships involve spending large amounts of time together. When most of one's time is spent with people in their ingroup, increasingly more of their mental and moral focus is aimed toward the ingroup. I argue that this focus leads to what I call ingroup myopia, a nearsightedness where the things that are close are clear but things far away are unfocused. Unlike nearsightedness in vision, though, people may not be able to perceive that people in the outgroup are not in focus and fail to take this into account.

The problem of ingroup myopia goes beyond the virtue of justice, though its other affects are not as easy to identify. In dealing with other people directly justice is able to highlight the problem of ingroup myopia regarding other people. The formation of an ingroup, particularly in humans but also in macaques and possibly other primates does not have to be based on proximity or familial relation; what unites an ingroup can be completely artificial. Ingroups can form around ideas and ideologies. If someone is raised in a context where they are surrounded by people who share an ideology, they may not be aware that there are other viewpoints. In other words, socialization can be so complete

that a person believes it is the only reality. Prudence, using right reason to determine proper conduct, could clearly be affected by ingroup myopia. This influence of ingroup myopia would affect all moral deliberation, making determining and achieving the virtues more difficult.

I am not arguing that people should not form genuine friendships with people in their ingroups. These friendships play a crucial role in connecting people to communities. I am arguing, however, that all of a person's genuine friendships cannot be from their ingroups. Forming genuine friendships with people who are different from one's self provides new insights into how other people think, dream, imagine, value, and act. Genuine friendship takes time, allowing trust to build as differences are explored. These friendships also refocus one's mental and moral attention, like corrective lens for the soul. Eyeglasses provide a restoration of right vision, but only if they are worn, so genuine friendships with others not in the ingroup need to be fostered, polished, and maintained.

Thomas Aquinas and Friendship

Thomas Aquinas assumes what Aristotle says about virtue and speaks of friendship sparingly. Where he departs from Aristotle, in my opinion, is that he seems to be more willing to accept friendship between unequals. Nowhere is this clearer than when he discusses the possibility of friendship with God. Aquinas departs from Aristotle's insistence that genuine friendship requires "conformity of wills" when speaking of friendship with God, because humans are incapable of it.³³⁷ There are several reasons

³³⁷ Daniel Schwartz, *Aquinas On Friendship*, Oxford Philosophical Monographs (Oxford: Clarendon Press, 2007), 44.

why humans cannot conform to the will of God, and these either have to do with human knowledge or with circumstances. Humans, at least in this life, cannot be certain that they do in fact know precisely what God wills. Additionally, even if they can determine what God wills, the reasons as to why God wills it are likely to be just as elusive, if not more so. Finally there are circumstances where it would be inappropriate for people in their specific context to will what God wills, like the death of a loved one.³³⁸

Aquinas, drawing upon Christian resources, expands the kind of relationships that are relevant for the moral life. Because of divine command to love enemies, Aquinas argues that charity is distinct from Aristotle's notion of genuine friendship. A person can love an enemy without being friends. Aquinas does still refer to the relationship as friendship, but it is not the same as Aristotle's genuine friendship. In the parable of the Good Samaritan, Jesus expands the notion of who is neighbor and Aquinas is trying to expand the concept of friendship, even if the friendships aren't the same.

What links genuine friendships and friendships of charity is the object of love. In both cases, Aquinas would argue that God is the ultimate object of love. The good is willed for the other, but the good in this case is union with God, making the object of friendship theological rather than philosophical. People are called to love others as God loves them, and because they love God, people can strive to try and see them and treat them the way God does. Although the theological shift opens the door to friendships of charity, it also limits genuine friendships. I would argue that Aquinas' understanding of friendship can only exist between Christians. He states that Christians should not remain

³³⁸ Ibid, 45.

friends with heretics, for example, but if someone does not believe in God, it is not possible for both to will the common object of love.

Expanding Aquinas' Understanding of Genuine Friendship

I argue that in light of original sin and original righteousness, it is possible and necessary for people to form and foster genuine friendships with people outside of their ingroup(s). It is possible because Niebuhr's understanding of human nature has two aspects, and Aquinas' identifies a natural and a supernatural end for humans. Broadly speaking, the *telos* for humanity is flourishing, with the ultimate expression of that for Aquinas manifesting in the beatific vision. Humans will not experience this before death, so while two Christians can will this for one another, the supernatural end cannot be achieved in this life, or of human accord. The natural end, however, can be achieved and humans play a part in this. Therefore, while it may not be possible for a Christian and a non-Christian to will mutually the beatific vision, they can will the natural end of human nature.

Original righteousness backs up this assertion because Niebuhr does not say that only Christians have a memory of original righteousness, but that all humans do. Even though all humans and human reason are affected by original sin, it is still possible for humans of any faith tradition, or even those who reject belief to do good and to remember that things should not be the way they are currently. The memory of original righteousness allows people in the outgroup to have something to contribute in a genuine relationship. People of different ingroups can share a common object of love, that is the natural end of human nature, human flourishing, and they can offer insight into what the good means to one another.

While I believe it is possible to form genuine friendships with members of the outgroup, I also argue that original sin requires people to do so in order to prevent an impoverished ethic. Forming genuine friendships with people not in one's ingroup provides additional insight into how others see the world, their commitments to one another, the rest of creation, and possibly even their conception of God. As a corrective lens for ingroup myopia, these friendships can help identify known shortcomings of one's perspective, can engender a deeper sense of empathy, and challenge one to develop their character more. People who make the decision to intentionally form these kinds of friendships will have a more robust understanding of what human flourishing means, and be more attuned to the harmony of relationships that Niebuhr identifies as God's will.

L'Arche Communities: A Concrete Example of Expanding Genuine Friendships

There is experimental evidence involving L'Arche caregivers to suggest that genuine friendships with people outside of one's ingroup lead to a more robust understanding of human flourishing. L'Arche communities are composed of people with intellectual disabilities and their caregivers.³³⁹ They live together and form deep relationships, much the way that Aristotle speaks of genuine friendship in ancient Greece. Unlike Aristotle's understanding of genuine friendship though, friendships within L'Arche are not between people who are the same. The core members of the community are those who are in need of care, and the caregivers engage in behavior that scholars

³³⁹ Kevin S. Reimer, *Living L'Arche: Stories of Compassion, Love, and Disability* (London: Continuum, 2009), 5-6.

refer to as “downward mobility,”³⁴⁰ and there is awareness that part of what makes the community successful is dealing with these differences.³⁴¹

Researchers have interviewed these caregivers and performed fMRI studies, but the most useful information for the current discussion comes from the game theory experiments. While several kinds of games were used in these experiments, the results from a novel rescuer task are quite amazing. In order to understand the results of the experiment, the game must be examined. The player has a set amount of play money, but this play money can be converted to real money at the end. In other words, even though the game is theoretical, it was possible for players to come away with some financial reward depending on how they play. The player witnesses a thief stealing money from another player, an anonymous person. They can choose whether to give the other player some of their money and this continues for fifteen to twenty rounds. Each time a player shares with another player, the chance that the thief will catch them doing so increases. If the thief catches them, the player sharing loses all of their money.³⁴²

The results of the experiments showed that L’Arche caregivers had significantly higher rates of sharing, even to the point of total loss compared to the control group. In fact, caregivers were approximately two to three times more likely to take greater losses than the victim.³⁴³ I would argue that this represents an increase in empathy and a

³⁴⁰ *Ibid.*, 7.

³⁴¹ *Ibid.*, 22.

³⁴² Michael Spezio, B Field, K Reimer, M Graves, R Nair and A Dreitcer. “Heartfulness as Mindfulness: Imitatio of Affectivity and Perspective in Christian Contemplative Practice” American Academy of Religion Annual Meeting. San Diego, CA. November, 2014.

³⁴³ *Ibid.*

broadening of the circle of concern. The genuine friendships formed with the others in their communities helped them see the needs of others in a new way and act in a more loving way towards strangers. In other words, the caregivers had a greater capacity for charity toward others due to their friendships.

While the L'Arche caregivers have formed genuine friendships with those not in their ingroup, they still follow the Aristotelian notion of genuine friendships living together. I argue that genuine friendships do not require such close proximity, but this proximity may bring about better results. The experiments showed a marked difference between the control group and the caregivers, but for my argument, the experiments do not parse out the influence of genuine friendships and proximity. Theology can have an influence on science, and one of those ways is providing research programs. I believe that a scientific research program could be done to see whether genuine friendships alone can lead to such an increase in empathy or whether it takes genuine friendships with people not in their ingroup and proximity to these friends.

Environmental Ethics

Niebuhr's anthropology in light of insights from the natural science and the theology and science dialogue also has implications for theological approaches to environmental ethics. The perfection of the first aspect of Niebuhr's anthropology, the creaturely aspect, includes individuals' relationships with the rest of creation. The nature of these relationships are clarified, modified, or even revolutionized when placed into conversation with the natural sciences and the theology and science dialogue. In the discussion of original righteousness, Niebuhr dives deeper into the requirements of the ultimate law for harmony in relationships. In doing so, the barrier between the two

aspects of human nature as well as natural law and *justitia originalis* is blurred, making the implications of the insights from the natural sciences even more important. While there was not a time that humans were without sin, cooperation and empathy are examples of glimpses of original righteousness found in human biological history. Empathy and cooperation properly understood in light of God's ultimate law, extends to nonhuman animals. Sin and original sin cause people to turn inward, away from God and others, and just as notions of friendship in virtue ethics need to be expanded, the ultimate law calls for expanding the circle of concern beyond the species. Furthermore, the discussion of Aristotle's types of friendships will be brought into an interspecies conversation, with the argument that friendships of pleasure and utility can exist between different species, but also questioning whether genuine friendship can extend beyond the species.

Human Relationships with the Rest of Creation

Anxiety, Depression, and Gut Flora

The perfection of the creaturely aspect of human nature comes from natural law, and especially of interest in this discussion, human relationships with the rest of creation in light of the natural sciences and the theology and science dialogue. The first relationship that is modified by the science and religion insights is the relationship between humans and gut flora, because there is overlap with the other forms of humanity's harmony of relationships. As mentioned previously, gut flora aid in digestive health for humans, but they also can contribute to conditions, including anxiety and depression. In other words, if humans do not have the proper relationship with gut flora, there are biological consequences that can affect not just human physical health.

Anxiety and depression are mental health concerns, but they also can be moral and spiritual concerns as well, affecting the harmony of humanity's relationship with God. In the chapter one, anxiety was discussed in detail and while anxiety does not have to lead to sin, because of human nature, including original sin, it often does. Anxiety also makes it more difficult to put one's trust in God, affecting the perfection of the second aspect of human nature. The theological virtues of faith, hope, and love, are all affected by anxiety and depression. Anxiety coupled with the human predisposition to look to themselves to alleviate contingency in their lives makes it less likely that people will put their trust in God and God's providence. Instead, they will put their faith in something else to solve their problems, such as themselves, or money, or even science³⁴⁴.

While anxiety clearly affects faith, depression influences hope profoundly. Hope is a particular kind of faith, namely faith in the future. Depression as an illness includes feelings of hopelessness and despair. It is difficult if not impossible to have faith in the future and God's providence if one does not have any hope. Such a loss is an extreme example of the disrupted harmony God intends, but not an uncommon example in the context of environmental issues. Whether it is pollution, climate change, or human driven extinction, there is often a feeling of hopelessness. Some even argue that the tipping point has been passed and that disaster is unavoidable now, even if drastic measures were enacted. A virtue ethic grounded in Niebuhr's anthropology requires hope, but this hope is a realist's hope. Critics have chastised religion for placing hope in the context of the next life, an otherworldly vision that seems to care little for the current creation. This

³⁴⁴ The final section of this chapter will explore the issue of genetic engineering including how science has become a locus of faith or salvation for some.

characterization is not always unwarranted, but it also represents a distortion of the third theological virtue, love.

Anxiety and depression can lead to a reduction in the capacity to love. If someone is anxious about their place in a contingent world, they begin to prioritize their needs before others. Needs in this sense extends beyond biological needs and can include the need to minimize or suppress their anxiety. Such behavior includes taking more than one needs, even if it leaves others with less than they need or none, because having more than is needed provides a sense of security. While it could be seen as loving one's self more than others, I am reluctant to consider such actions self-love. It is self-indulging or self-serving, but the driving force in the action is not love. Life is good, and survival is necessary to live, but God desires for humans to have ordered souls and to care for one another. Fulfilling one's need for security is a disruption of these, because even though humans are self-transcendent, they are not omnipotent. Life will always contain some uncertainty, and trying to eliminate that themselves, without turning to God, is not love. It is also not properly ordered love to satiate one's desire at the expense of others' needs.

Other human relations with the rest of creation

While gut flora represent a very visceral relationship with humans, the biological sciences continue to explore humanity's connection with the rest of creation. Theologians have not done an adequate job of incorporating what it means for humans to be the product of evolution into their anthropologies. In chapter two I argued that rejecting a literal interpretation of the Genesis creation accounts allows theologians to utilize what science says about the origins of life and human life. This reimagining of human origins affects humanity's relationship with the rest of creation. Humans evolved from other

organisms, they were not created either before the other animals (Genesis 2), or separate from the other animals (Genesis 1). All known life on earth is connected in the past, and humans are a part of that. Other species, both living and extinct, share some kind of common ancestry with modern humans, even though that commonality may be millions or even a billion years ago. Life is an extremely extended family and humans are a part of the family photo, not just the photographer.

Stewardship

Environmental ethics has sought to change the language of humans having dominion over the earth to the language of stewardship. Humans, made in the image of God, act as God's stewards on earth, caring for God's creation. While I do not disagree with the ideas represented in stewardship, I believe it does not represent properly the relations between God and humans and humans and the rest of creation. Humans as stewards of God's creation can refer two understandings of what a steward is. The first is a position of authority granted by a monarch and the second is a servant in charge of his or her master's property and household.

It seems to me that humans do not rule the earth in God's name. Life on earth survived without humans for billions of years and there is little to suggest that non-domesticated animals recognize human authority at all. I am also uncertain whether the harmony of relationships Niebuhr describes would involve humans governing all other species. I argue that the governing notion of stewardship is an attempt to reform the damage that humans perpetuate on the rest of creation, but it still assumes that humans have complete access or control to the rest of creation. The ways in which humans have treated the rest of creation only reinforce the power of anxiety. Humans continue to

consume the resources of the planet at an unsustainable rate, regardless of the consequences for other organisms, including other humans.

I think a better model is to envision humans as trustees. God created and loves the entire universe, and while ultimately it belongs to God, God gives creation to itself. Humans have historically seen themselves as the pinnacle of creation, specially created by God and set apart from the rest of creation, which God gives to them. I argue that God does not give creation to humans, but to all life, and makes humans trustees of the trust, creation. As a legal concept, a trust is a collection of property or assets created by one person for the benefit of one or more others, often used for transferring property from one generation to the next. The person administering the trust is the trustee, and it is their responsibility to make sure that the trust benefits those it is intended to benefit. The trustee holds the property and can usually receive some compensation for their effort, but they are held accountable for safeguarding the trust for the beneficiaries.

In such a model, human are both trustees and beneficiaries of God's trust, but it broadens the focus of who is to benefit from creation. God wants all life, including human life, to flourish. Humans receive the benefits of God's trust. They can utilize God's gift in a variety of ways to strive for the harmony that God desires. On the other hand, they are also self-transcendent beings and this allows them to see the contingency of life, not just human life but all life. Because of this, God made humans trustees so they could protect the trust for themselves and their descendants, but also for the good of all creation. There are many theologians who believe that God desires to be in relationship with all of creation, so God created evolution in such a way that it tends towards the possibility of self-transcendence. If other organisms are capable of self-transcendence,

humans would not be the only trustees. Trustees should not be considering their own gain as their first priority. They are responsible for making sure the trust is responsibly invested or disbursed. As trustees, humans have to look to the interests of all life and act in ways that will promote its flourishing.

The Ultimate Law and Creation

With the distinctions between the two aspects of human nature and natural law and *justitia originalis* weakened, the ultimate law of God is rooted in both the harmony of relationships of the first aspect of human nature, and the theological virtue. The discussion of gut flora showed how humanity's relationship with even organisms as tiny as bacteria can shape their relationship with God, themselves, and one another. Moving from a model of stewardship to one of trustee helps situate humans more closely with the rest of creation. The next step is examining how the ultimate law is changed by humanity's relationship with the rest of creation. Following that is an analysis of how the ultimate law might apply to the rest of creation.

Modifying the Ultimate Law

The first part of the ultimate law is humanity's relationship to God, a relationship not based on simple obedience but love. An unhealthy relationship with gut flora affects how humans trust and love God, but more importantly for the discussion at hand is the fact that human relationships with God also depend on loving God and doing what God desires. In other words, one's relationship with God is not private; it is linked to how one treats one's self, others, and the rest of creation. Embedding humans in the evolutionary process and not as specially created beings means that humans are more closely related to

the rest of creation, have obligations to creation, and that these obligations affect their relationship with God. What these obligations might be will be explored in the next section.

The second part of the ultimate law is the ordered soul, harmony within the self. An improper relationship with gut flora can affect the part of the law as well, but the insights of the sciences point to something else as well, the importance of sociality. Humans are social animals and this is part of how they evolved. Even though there is cultural pressure to be an individual who is self-sufficient, such a goal is wrong in the context of one's relationship with God, but it is also unhealthy for the individual. Humans are not meant to be alone. God recognizes that in the creation narratives and there is consonance between such an interpretation and the sciences. Aristotle and Aquinas take for granted that humans need companionship, in a variety of forms. Friendship is a necessary good, like food and shelter. As empathetic beings, humans are influenced by the world around them and shaped by the encounters and relationships they have. The desire humans have to connect with others extends beyond other humans, to other organisms or even to be in a natural environment free of human interference, or at least minimal human influence.

I argue, therefore, that the ordered soul requires connection to others, both human and nonhuman. Martha Nussbaum, in her capabilities approach, lists other species as one of the core capabilities humans must have.³⁴⁵ Even if the domestication of animals began as an additional food source or for extra labor, which may not be the case, humans have

³⁴⁵ Martha Craven Nussbaum, *Women and Human Development: The Capabilities Approach*, The John Robert Seeley Lectures (Cambridge: Cambridge University Press, 2000), 80.

coevolved with companion animals for thousands of years. The final subject discussed in this part of the chapter will be whether interspecies friendships exist.

The third part of the ultimate law is humanity's relationship with the rest of creation. Unsurprisingly it is this part that is most affected by the insights of sciences. Shifting from an image of stewardship to one of trustees changes the ways in which humans interact and relate to nonhuman creation. In such a model, nonhuman creation is not something to be controlled or exploited, or even something to preserve. Rather, acting as a trustee requires humans to act in ways to protect the gift of creation that God has given, but more importantly to contribute to its flourishing as well. This includes allowing other organisms to grow, reproduce, and evolve free from human exploitation. Some would say that avoiding exploitation is not far enough, that organisms should be free from human influence or interference, but I believe this is not possible and also a misunderstanding of evolutionary history.

Humans are a part of evolutionary history and as such, have been interacting with other organisms for tens of thousands of years. It is true that technology has allowed humans to act in ways they haven't before, but humans are not separate from creation; they are a part of it. To restrict humans from interacting with nonhuman creation at all would be a change from evolutionary history as well as harmful to the harmony of an ordered soul for humans. Humans require the rest of creation. The problem is that technology has accelerated the impact humans have on the rest of creation, and on a global scale. In order to truly change the way that humans interact with the rest of creation, the ultimate law has to be applied to creation.

Applying the Ultimate Law to Creation

The ultimate law guides how humans interact with one another and how they should act toward God, but less attention has been given to how the ultimate law might apply to the rest of creation. That being said, it is beyond the scope of this project to express in detail how this would work. In the context of this particular discussion, an overarching example of love for nonhuman neighbors will be examined followed by an argument that the permeable distinction between natural law and original righteousness does allow for humans to treat different parts of nonhuman creation differently. Finally, attention will be given to two specific examples of how the ultimate law changes human interaction with nonhuman creation, animal experimentation and factory farming.

If love is the requirement of the ultimate law, then the most direct way to apply it to nonhuman creation is for humans to love their neighbors. The parable of the Good Samaritan expanded the notion of who one's neighbor is, and the insights of the sciences only help further extend this notion. Humans are social and at least existentially symbiotic, and when combined with evolutionary history and knowledge of ecosystems, it becomes clear that one's neighbor is more than just the humans in their immediate vicinity. Numerous species are needed in order to sustain a healthy ecosystem and when things are out of balance, there are repercussions for everyone. Nonhuman creation as neighbor is not limited to situations where they intersect with humans, however; other animals can be neighbors even if they have no direct contact with humans.

The one thing that qualifies how humans interact with the rest of creation is the permeability between natural law and original righteousness, allowing the insights of science to help shape proper behavior. While evolution does provide examples of cooperation and symbiosis, there are also examples of competition and arms races

between species. Because the ultimate law is not entirely distinct from the natural law, it is possible that humans can treat some organisms one way and others organisms differently. Viruses and bacteria that threaten human health, for example, do not have to be given the same level of consideration as species with complex nervous systems. Humans can stand in solidarity with certain organisms but not be required to take that stance with every creature.

There is continuum for life in terms of complexity and capacity, and how humans interact with species changes as one moves through the continuum. The problem is that humans have historically seen the continuum as parabolic, with the rest of creation very similar and changing drastically to humans and a select few other species. I am not arguing that people can treat organisms on the far end of the continuum opposite humans worse than they currently do; I am instead saying that the continuum is more gradual than people have thought and therefore more organisms must be treated in more respectful ways. Two specific examples of this are animal testing and factory farming.

Humans using other animals for some testing purposes are violations of the ultimate law. Animals are used for testing a variety of products including pharmaceuticals and beauty products. The justification is that researchers are trying to eliminate or reduce the harm to humans by seeing how other organisms respond to products, to determine whether they are safe for human use. Humans have to give consent if they are involved in experiments, but the animals used in testing cannot and many are often killed as part of the research. If humans are trustees of creation, treating nonhuman animals in such a way is a misuse of their responsibilities, because humans seem to be benefitting at the expense of nonhuman creation, with no benefit at all to nonhuman

creation. However, not all animal testing needs to be abandoned. Experiments in which there is a benefit to the species being tested could be consistent with the law, as well as medical practice on animals to further surgical techniques for other organisms, including humans.

One could argue that these animals do not deserve consideration similar to humans because they are far away from humans on the continuum of complexity and capacities, and while exceptions can be made in terms of research on deadly microbial diseases, I assert that this argument cannot hold for the vast majority of animal testing. Animals are chosen for reasons for research, such as a short life span allowing the examination of long term effects on an individual's life or even through generations. In order to provide information about how humans would respond to a product, however, the animal used for testing must provide some kind of useful comparison with humans. Animals may have neural networks similar to humans, or skin that reacts in similar ways, etc. In other words, the animals most useful for most product testing are not those at the far end of the continuum, but those who have something in common with humans. There is no way to reconcile this with any kind of harmony in relationships between God and self or between self and the rest of creation. Love requires a higher standard of how nonhuman animals should be treated.

Factory farming is another example of human behavior that violates the ultimate law. Humans have lived with domesticated animals for thousands of years, but factory farming represents an unhealthy, exploitive relationship between humans and the rest of creation. I would argue that the ultimate law, especially in light of its permeability with natural law, does allow for humans to kill other animals for food, but it cannot endorse

the tactics of factory farming. Raising animals for food requires treating the animals with the utmost respect. This would include a healthy living environment with proper space and nutrition. Religions that honored the sacrifice of the animals killed present a more loving relationship with the rest of creation and are aligned much closer to the ultimate law. The number of animals raised sustainable for food should be drastically lower, humane killing methods, and minimizing or theoretically eliminating waste is essential in order to show proper respect for the animals dying. It should be evident from even a cursory examination of several environmental issues that there are many ways in which the ultimate law can be applied to human relationships with the rest of creation. While the outcome may not always differ from other approaches, a scientifically informed Niebuhrian anthropology offers a vision of humans thoroughly embedded in the created order, and articulates a model of self-transcendent species as trustees, given the task of protecting nature and helping it to flourish.

Friendship and Nonhuman Creation

The final section on environmental ethics will focus on particular types of relationships between humans and nonhuman animals, friendships. Utilizing Aristotle's categories for friendship, I will argue that friendships of pleasure and utility readily exist between humans and nonhuman animals. Friendships of pleasure contribute to humans' ordered souls, and both types of friendships can be useful in establishing reasons to curtail human action in order to protect nonhuman animals. Finally, the question of whether humans and nonhuman animals are capable of having genuine friendships will be raised.

Friendships of Pleasure and Utility

Friendships of pleasure and utility are more transient than genuine friendship for Aristotle, so given the diversity of animals on the planet and the many circumstances in which humans find themselves; it is not surprising that many friendships of pleasure and utility exist between humans and nonhuman animals. Pets are the easiest to identify locus of friendships of pleasure; people love their pets and many pets are able to show obvious affection for their humans. However, pets are also the most likely place to try to find genuine friendship, so more time will be spent on these relationships in the next section. Friendships of pleasure between humans and nonhuman animals exist in a variety of places, from the person feeding ducks at the park, to the rise of kitten cafes where people get to schedule a time to play with cats. The object of such friendships is the pleasure each gets from one another. Given that humans and many other species are social, and some species have even been breed/coevolved with humans, there should be no question that humans and nonhuman animals can derive pleasure from one another.

As discussed in an earlier section, human interactions with other species also play a role in helping the harmony within humans. Humans as social beings need these kinds of relationships and there is growing evidence that nonhuman animals can help humans with a variety of conditions. Animal therapy is being studied and utilized more to help people deal with mental health concerns, stress levels, and even to improve recovery from medical procedures. One might consider these friendships of utility, but I would argue that even if the medical benefits are the reason for engaging with other species, that the pleasure one gets from the interaction is what is making the difference. Friendships of utility are quite different.

Friendships of utility between humans and nonhuman animals include animals used for labor, assistance animals, and animals raised for food or other products. It is possible and even likely that people interacting with these animals will receive pleasure from working with them, but the primary purpose of the relationship is the help these animals provide. Assistance animals such as Seeing Eye dogs help people interact with the world more easily and animals used in labor, such as carrying goods from one place to another, provide physical and economic support. Animals raised for milk, wool, and meat, among other things, can give companionship, but their utility is in how productive, reproductive, and healthy they are. Friendships of utility may be the most likely situations where exploitation could take place, but as stated previously, the ultimate law can be applied to nonhuman animals, and the requirements of love mean that humans need to act as trustees and look to the well-being of other organisms.

I would argue that Aristotle was too narrow in restricting moral significance solely to genuine friendships. I believe friendships of pleasure and utility matter for the moral life. Friendships of pleasure with nonhuman animals can affect individual humans' well-being, and an ordered soul is very important for recognizing the virtue as a mean and in moral deliberation. Friendships of utility are an opportunity for people to interact with nonhuman animals that provides some tangible benefit to humans. These interactions should influence humans. Service animals could literally be life savers, and animals used for labor could provide new opportunities for people to reach customers they could not reach before, or to allow someone to continue working who would be unable to otherwise. Friendships of pleasure and utility could even serve as reminders of original righteousness. Nonhuman animals can be vehicles of God's grace just as humans

can be, and another animals giving care or comfort is surely a reminder of what God desires for all life.

Genuine Friendships with Nonhuman Animals?

Humans can form friendships of pleasure and utility with nonhuman animals, and while these can affect how humans treat the rest of creation, I believe that genuine friendships would create an even more pronounced change in how humans view the rest of creation. The question is whether humans can form genuine friendships with nonhuman animals. My answer is a qualified yes that it is possible, in certain situations, but that ultimately it is unlikely that there is sufficient evidence to support the claim. I will expand the argument about willing the good for one another when the ultimate notion of the good is not shared. Then I will claim that even if an interspecies willing of the good is possible, that the instances of genuine friendship would be very rare, and only between certain species.

Aquinas argued against heretics and believing remaining friends because they did not hold in common the ultimate end of humanity. I argued that such an understanding was too narrow and that it is possible for people to will mutually the *telos* of humanity, at least the natural *telos*, even if they do not share a common view of the supernatural *telos*. The question of whether nonhuman animals have a sense of the divine is an interesting question, but one that is beyond the scope of this project and not necessary to the argument at hand. If humans can will mutually human flourishing at the natural level, then might it be possible for nonhuman animals to do the same?

I believe that it is possible, because even though humans are self-transcendent, they are not omniscient. If I will the good for a genuine human friend, I understand what the *telos* is for humanity, but I am unable to know with certainty how exactly that plays out in the life of my friend. Each person has differing capabilities and these affect the virtuous mean. The earlier section on determining the mean makes it clear how difficult this process is for an individual, one who is aware of their tendencies but can still be led astray through original sin. And if it is that difficult for a person to determine the mean for her or his own life, how much more difficult it must be to try and identify the mean for another, with far more incomplete information? Granted, genuine friends might spend a great deal of time together and know each other very well, so they might have more success than others in trying to determine the virtuous mean for their friend, but ultimately they will fall short.

Most nonhuman animals, however, are likely not capable of even understanding what the natural *telos* of humanity is, so it could be asked why it matters that humans cannot grasp fully what the good means for one another? I would argue that humans are actually willing the good for one another as best as they can understand it. Hopefully that changes over time, as people grow into their genuine friendships deeper, but also as their understanding of what the good entails increases. Using that line of thought, I believe it is possible for some nonhuman animals to be capable of willing their understanding of the good to other species, including humans. If friendship between humans and God is possible even though humans lack substantial knowledge of God, then nonhuman animals close to humans on the continuum surely can do the same, since the difference between them is infinitely less than between God and humans.

The question then becomes which nonhuman animals might be capable of genuine friendships with humans. I would argue that animals that are closest to humans in terms of abilities and capacities, but also social animals who have coevolved with humans. Some would argue that dogs do not possess self-consciousness. However, given their coevolution with humans, I argue that they have enough knowledge or instinct of human emotions that they are capable of expressing their understanding of the good toward humans. Primates have greater mental capacities than canines, and many would argue they have self-consciousness and/or theory of mind. They might be capable of understanding some of what the good means for humans, but they are also more capable of enacting their notion of the good with humans.

The problem is that it is not possible for various reasons, for all humans to have access to nonhuman animals that can form genuine friendships. I do believe, however, that researchers who have experienced a glimpse of genuine friendship have been moved profoundly by it. Pets provide a more accessible experience, but even then, there are factors of class and privilege that play into who has access to such animals. Nussbaum's capabilities approach argues for the necessity of access to other species, and I have come to the conclusion that it is necessary. I am unsure how best to increase the number of people who could experience genuine friendship with nonhuman animals while still being trustees of God's creation.

Biotechnology

The final example in this project of the ways in which a scientifically informed theological anthropology shapes theological ethics is biotechnology and human enhancement. Insights from the science and the theology and science dialogue show that

human nature is flexible and open to change, that DNA is not a sacred molecule that humans must never touch. After providing support for humans being allowed to engage in biotechnological changes, the argument moves from permission to prescription. There are important reasons why humans should be pursuing advances in biotechnology, reasons that include love of neighbor, both human and nonhuman. There are environmental advantages that would lessen the strain humans place on other organisms. On the other hand, while there are compelling reasons to pursue biotechnology, there are other reasons, including constraints from other species that argue against certain kinds of research or application. Humans carry the effects of original sin, and biotechnology provides ample opportunities for perpetuating sin. Many scholars look to Niebuhr's analysis of pride as the predominant form of sin in this context, but I believe that sensuality has just as much to offer to the conversation.

The Malleability of Human Nature

As stated previously, as a product of evolution, humans have evolved and continue to do so. Natural selection is still at work. Even though humans have a level of control over their environment that other organisms do not have, this control is not absolute and not uniform. Though the world seems smaller than ever, humans still inhabit a variety of climates and face different challenges in terms of having sufficient food, water, and other resources. Additionally, the effects of human action on the environment are causing changes to their own habitats. Climate change is changing weather patterns, temperatures, and the sea level. Even when humans are not affected directly, they are indirectly affected through other organisms. Oceans are becoming more acidic and this affects the organisms living in the water, which can affect human diets. Hormones used

in animal feed are acting upon the animals, but also leading to changing levels in humans as well through their consumption. Everyday life may mask it, but there is enough change occurring over time that the human genome is still being shaped by biological factors.

Perhaps more visible to people are the ways in which human choices can directly lead to changes in the next generation. Just as humans can form ingroups based on biological characteristics or abstract ones, mate selection is influenced by the biological and the abstract. Religion, culture, economics, and a variety of preferences in food, entertainment, etc. can influence who people seek out romantically. A cursory look at any online dating service reveals the lengths people go to specify the biological and arbitrary characteristics they desire. Even the choice to have or not have children affects the overall genetic makeup of humanity.

All of these considerations, however, are not changing human nature fundamentally. If humans changed enough over time, it is possible that they could become one or more new species, and that would lead to a change in understanding essential human nature. What these changes do point to, however, is that change within human nature is possible. Biotechnology provides humans with new tools that could make quicker changes to genetic makeup of humans and other organisms, even to creating new species. The question that has been asked since even before these technologies were a reality is whether humans should do it. In the next section I argue that there is nothing inherently wrong about engaging in genetic engineering, in part because of the flexibility in the human genome and human nature that has existed and continues to exist.

Playing God or Acting Naturally?

Opponents of biotechnology argue that people are playing God by attempting to change gene expression, insert new genes into a genome, or utilize *in vitro* fertilization, but such arguments are wrong for several reasons. These kinds of arguments are a form of a natural law approach. Arguing that humans are doing something unnatural requires an understanding that there is a natural and that what is natural is good. While I affirm the goodness of creation, I also believe that creation through evolution is an imperfect process that can lead to harmful problems for organisms. Mutations are a necessary part of evolution; they introduce novelty into a genome. However, mutations can also interrupt the proper expression of a gene, leading to a loss of whatever gene product was produced. Likewise, when DNA replicates it is an imperfect process, and mistakes missed by proofreading enzymes can lead to similar results. People who are carriers for genetic conditions can pass on these genetic conditions to their offspring. One cannot look at all of creation and say that it is completely good as is and there is no room for improvement or intervention. In fact, it is possible to look at carriers and say that choosing to reproduce with the use of *in vitro* fertilization and testing embryos before they are implanted to ensure that only embryos that do not have the disease are carried to term is a prudent use of technology.

The accusation of playing God is also wrong because as a natural law kind of approach, it is failing to take all that is known about nature into account. An evolutionary understanding of creation is very different than a nonevolutionary understanding. If one interprets Genesis literally, God created each species distinct from one another and in their present form. In that view, species are static entities that do not change. In an evolutionary view, all life shares a history in the form of a common ancestor. Organisms

change over time and new species evolve and existing species go extinct. Life is a dynamic process and continues to be. The ways in which researchers insert genes into bacterial DNA rely on the mechanisms bacteria use to transmit DNA to one another. Restriction enzymes occur naturally, but humans, aware of which sequences a particular enzyme acts upon, can synthesize DNA with those tags, allowing a useful gene to be spliced into the bacteria's genome. Biotechnology accelerates change or allows for some new forms of change, but change is natural.

A third way in which the argument of playing God is problematic is in the relationship between religion and science. The argument is a natural law approach because it looks to what is natural, but it is theological as well because it asserts that humans overstep their natural place in the world by doing something that only God should be allowed to do. The theological aspect of the argument is problematic in two ways. The first is that it makes assumptions about God and the way that God acts in the world. Secondly, it makes assumptions about how humans should view nature in light of the divine.

The accusation of "playing God" provides insight into the assumptions people have regarding divine action. Humans should not engage in these practices because they are trying to exercise power that only God should have. God alone creates and humans are sinning if they attempt to usurp this power. Such an understanding would seem to argue that any genetic change is the result of divine action, although it is less clear whether this action needs to be interventionist or not.³⁴⁶ An interventionist approach

³⁴⁶ The Center for Theology and the Natural Sciences (CTNS) and the Vatican Observatory partnered for over 10 years to create a book series regarding divine action.

would say that God breaks the laws of nature and is the direct cause of a mutation or of healing. A noninterventionist approach would say that God works through creation to bring about change, as the cause of spontaneous mutations or proofreading errors for example. Both of these examples place the burden completely on God, making God directly responsible for the development of a genetic disease, or even the death of a loved one.

While the accusation of playing God is an argument about how God acts in the world, it also is an argument about the status of nature, and how humans should not modify it. Francis Collins uses the analogy of DNA as the language God uses to create life. People who reject biotechnology on the grounds of researchers are playing God take this analogy to the extreme. DNA, as the mechanism of God's creative acts is off limits to everyone other than God. More than that, DNA is given a quasi-sacred or sacred status, and the role of humans then is to protect its sanctity from human sin.³⁴⁷ While such an argument would appear to be consistent with identifying humans as trustees of creation, it fails to take into account the change that occurs in nature. As discussed previously, life is dynamic and change is necessary for the possibility of evolution. What is actually being protected is an understanding of nature, even human nature, found in the past.³⁴⁸ If nature is unchanging and God created each species the way it is now, then biotechnology is a threat to creation. If nature is dynamic and the process of billions of years of evolution,

The authors of these volumes make the distinction between interventionist divine action and non-interventionist divine action. Interventionist divine action is when God acts in such a way that suspends the laws of nature, whereas noninterventionist divine action is a position that God acts in and through the laws of nature which were created by God.

³⁴⁷ Ted Peters, *The Stem Cell Debate*, Facets (Minneapolis: Fortress Press, 2007), 53. Ted Peters, ed., *Genetics: Issues of Social Justice*, The Pilgrim Library of Ethics (Cleveland, Ohio: Pilgrim Press, 1998), 29.

³⁴⁸ Peters, *The Stem Cell Debate*, 55.

with God acting in noninterventionist ways in the process, then biotechnology is a tool that can be used properly or improperly. It requires thought, deliberation, and care, but it is not inherently a violation of the sacredness of nature. In other words, there can be a virtuous mean in approaching the use of biotechnology. This mean would lie between the deficiency, where DNA is treated as sacred and not allowed to be altered even if it would be helpful, and an excess of making changes without any regard to motivation, purpose, or probability of success. The mean in this case would be the prudent use of biotechnology. Part of that process is determining whether biotechnology should be used and to what ends.

Why Pursue Biotechnology?

Although there is not a single, universal reason why people argue for the use and further development of biotechnology, the most encompassing reason revolves around the alleviation of suffering. Such an end is not new; medicine for millennia has tried to prevent, treat, and cure disease. What is novel to biotechnology are the ways in which prevention, treatments, and cures can be accomplished. Proponents of regenerative medicine promise great strides in human health and lifespan. Treatments using stem cells could restore proper functioning to damaged or nonfunctioning tissue and histocompatible organs could be grown in a lab, eliminating the risk of the body rejecting a donor organ. Continued health and the ability to regenerate cells would extend the human life span, some argue to the point of immortality. Improving the health of an organism allows for human flourishing, both nonmoral and moral. Nutritive flourishing is not moral flourishing, but a basic standard of living, including health is necessary for a

person to live a virtuous life. Increasing health supports this baseline. Additionally, increasing one's life-span allows more time to acquire virtues, or to serve as an exemplar.

There are also theological reasons for supporting the use of biotechnology to reduce human suffering. If God has created life in such a way that led to self-transcendent beings who can recognize the suffering in others and be able to at least attempt to alleviate that suffering, then biotechnology is a possible tool to enact love of neighbor. Jewish bioethicists place a strong emphasis on the role of humans as healers and that people are obligated to help one another. Christian bioethicists point to Jesus' ministry and the major role that healing played in it.

In the context of Niebuhr's anthropology, used properly, biotechnology could be an expression of the ultimate law. Humans possess knowledge about inherited disease that they did not previously have, and steps have already been taken in order to try and alleviate suffering, particularly in terms of passing on genetically inherited conditions to one's offspring. Genetic counseling is a first step, where people can be tested to learn what traits they are carriers for and what the probability is that their children would inherit these. After counseling some families decide to not have children, some try to conceive naturally, and some choose *in vitro* fertilization (IVF). Eggs are fertilized in a lab and additional screening can occur before they are implanted. Pre-implantation genetic diagnosis (PGD) identifies genetic conditions in the embryos and patients can

choose to implant all of the embryos or just some.³⁴⁹ These tools allow people to at least attempt to avoid problems that would have been unavoidable even fifty years ago.

Identifying the possibility of inherited conditions and only implanting embryos without these conditions is a first step, but there are additional steps that can be taken to eliminate or prevent these conditions. PGD helps people who want to have children, but for people who already exist and have genetic conditions, biotechnology could offer a cure. Gene therapy would allow a properly functioning version allele of a gene to be introduced into a patient, granting or restoring the production of a gene product. For example, the goal of gene therapy for type 1 diabetes would be to have the islet cells in the pancreas produce insulin. In other words, targeted treatment could be developed to cure single gene conditions.³⁵⁰

Curing a condition in someone who already suffers from a condition is an appropriate response to their suffering, but it might also be possible to prevent the same suffering in future generations. If potential parents go through genetic counseling and are aware that their offspring could inherit certain conditions, it is possible to combine IVF with gene therapy to replace the deleterious alleles with functioning ones before the embryos are implanted. This would also allow for all of the embryos to be implanted, a development that would address the concern of what happens to the embryos with inherited conditions that were not implanted.

³⁴⁹ I am intentionally avoiding discussion regarding the status of the embryo at this point and what happens to embryos that are not implanted. Such discussion is beyond the scope of this project.

³⁵⁰ This is not to say that gene therapy could not be used on multigene traits, but I believe until it can address single gene conditions successfully, the overwhelming majority of research will be geared toward single gene conditions because they theoretically should be easier to identify and treat.

Gene therapy on an IVF embryo would be moving beyond what has been done previously, because it would affect that embryo's offspring. Restoring proper pancreas function to a type 1 diabetic is classified as a somatic change, it affects certain cells in the individual, but the therapy would not be passed on to the patient's offspring. If an allele was changed in an embryo before implantation, however, it would change the genome of that individual and these changes would affect all of the cells in the embryo, which would change the cells that create gametes, allowing the therapy in essence to be passed to the next generation. Such a change is classified as germline therapy. Germline therapy could allow for the eradication of deleterious inherited conditions over time.

Thus far, the prevention or treatment of inherited conditions has been the focus, but biotechnology also provides the potential to go much further, to make changes or improvements to the human genome. Scholars create a dividing line between types of biotechnological treatment; there is therapy and enhancement. Therapy is the discussion over. It deals with restoring health. Enhancement goes beyond what was considered healthy or normal, attempting to improve and build on human capacities. Often enhancement is tied to intelligence, strength, or any kind of capacity that would create an advantage over others. Neither therapy nor enhancements need to be only genetic either. Cybernetics can be used as a therapy to replace a lost limb, or ocular implants can be used to increase the spectrum of human sight as enhancement. Transhumanists want to evolve past modern humans into other species, using whatever technological means are possible, be it genetic enhancements, hybridity of flesh and cybernetics, purely mechanical bodies, or even abandoning a human-like form altogether and uploading minds into computers to live as noncorporeal beings. While there are reasons to question

some of the goals or methods transhumanists use, I would argue that Niebuhr's anthropology can provide support for moving beyond therapy into enhancement, in certain circumstances.

Humans do not possess original righteousness, but have a memory of original righteousness, through human enhancement it may be possible to increase human awareness of original righteousness, or improve the cultivation of the virtues. Cooperation and empathy in the third chapter provided biological anchors for humanity's memory of original righteousness. If there is a method of increasing empathy in people, whether it be through gene therapy or pharmaceuticals, doing so could lead to an increased awareness of humanity's place in the universe, and concern and care for other humans and the rest of creation. The result would be an increase in moral development, compounded by genuine friendships with those not in one's ingroup. Being able to form these genuine friendships would be easier due to the increase in empathy and the effects of these friendships in the way that people live their lives could further Niebuhr's understanding of what God intends for humans. The perfection of human nature resides in the harmony of relationships and increasing empathy would certainly be a step in that direction. Such an approach to human enhancement is optimistic, and perhaps overly optimistic. Even though there are reasons to pursue the use of biotechnology in therapy and enhancement, there are also reasons to avoid its use, or to temper the expectations.

Reasons for Pause

The first reason to be cautious about biotechnology is that while humans have learned a great deal about the world, that knowledge is incomplete and there are risks of safety and unintended consequences. In 1999, an eighteen year old male died from the

gene therapy he was receiving for a genetic disease he developed, but did not inherit. Because it was the result of a mutation, his condition was not as severe as children who were born with the condition. He was not in a life-threatening position; the condition was manageable with diet and medication. This was the first known case of someone dying from undergoing gene therapy and it gave people pause regarding informed consent and safety. Gene therapy trials have continued and expanded, but this example serves as a lesson that there are good reasons for not rushing ahead with biotechnology. If engaging in this kind of research has the goal to reduce human suffering and treat, prevent, or cure disease, then the safety of patients should be the top priority. Researchers, however, have to produce results in order to receive funding and there is an increasing connection between research universities and corporations. These factors raise the question of whether patient safety is the top priority. At the end of this section, patient well-being will be used as a selection criterion for what kinds of biotechnology should be embraced. Prudence needs to be exercised in order to temper funder's expectations and to act in ways that benefit those in need.

A related concern to incomplete knowledge, safety, and patient well-being is setting realistic expectations. Regenerative medicine has promised treatments and cures to many conditions, and an increased life span in general. Transhumanism argues that given enough resources, immortality is possible and should be pursued actively. Yet reality has yet to live up to the promise. Progress has been made in stem cell research, but the first human trial involving induced pluripotent stem cells began in 2014, with some

questioning whether the trial is safe.³⁵¹ Theoretically regenerative medicine will provide many benefits, but it would seem that these benefits will take longer than anticipated originally. Setting realistic expectations reduces the chance of giving people false hopes. The economic aspect of research and treatment clouds the issue again; money is needed for basic research, for targeted research on specific conditions, and to development treatments, and people are more likely to give money, agencies more likely to provide funding, and companies more likely to invest if significant results appear to be forthcoming. Billions or more have been spent on researching regenerative medicine, which leads to other concerns.

The allocation of resources for medical research and treatment raise social justice concerns about the prioritizing of funding and research, as well as access to treatment. Certain conditions receive more research funding than others and for a variety of reasons. The mechanism of the disease may be well understood, the potential cure is believed to be easy to produce, the condition may be more life threatening and communicable, or a disease may have powerful spokespersons advocating to the public to help find a cure. These might explain why certain things do receive more funding, but they do not answer the question of whether they should. Though such an argument could be criticized as being utilitarian, some scholars argue that the money being used for research should be allocated in such a way as to do the greatest good. Preventing a disease is better than letting people suffer its effects, but millions of people worldwide contract diseases due to a lack of clean water. Advocates argue that a fraction of the money being spent on researching diseases that affect a small percentage of the global population could be

³⁵¹ David Cyranoski, "Next-generation stem cells cleared for human trial," *Nature* (September 2014): 1.

better spent on providing the infrastructure needed to prevent diseases that already have treatments and cures. But even if the money were to be used solely for medical research and the development of treatments and cures, similar questions can be asked about which conditions should be prioritized.

It is not only the allocation of research funding that is a concern of justice, but also the allocation of potential treatments, cures, and enhancements. Businesses invest billions in research and development and their successful products need to cover not only the cost of themselves, but also the cost of unsuccessful products. This raises the cost of medicines or procedures, meaning that at least at first, only those with financial resources will be able to benefit. While this is clearly a concern for therapy, I argue it is even more important regarding enhancement, especially if the enhancement is heritable. It is not difficult to imagine that the people evolving beyond modern humans most likely will be those that can afford it, eventually leading to a dystopia of species divided by class. Justice is the concerns here, and it would not be virtuous to allow those who have more opportunities now to increase that advantage through financial means and pass those advantages on to future generations. Another criterion of the proper use of biotechnology will need to address the question of who benefits from the research.

Biotechnology and Sin as Pride

Patient safety, reasonable expectations, and the allocation of resources are reasons to consider the ways in which biotechnology should or should not be done, but all of these still make assumptions about nature and human capabilities. Reasons to pursue biotechnology or to restrain it both support an underlying assumption that humans are able to understand and manipulate nature profoundly. In the context of gene therapy, the

assumption is that conditions have specific underlying causes and these genetic causes can be fixed. While this is true for a number of conditions, it is not the case for all conditions, and without acknowledging that, people can fall into the trap of genetic determinism. Genetic determinism is a form of reductionism that places the entirety of human nature in humanity's genome. Genetic determinism, and to some extent any pursuit of biotechnology, is an expression of sin as pride.

Genetic determinism looks both to the past and the future. Ted Peters identifies two forms of determinism in the general expression of genetic determinism: puppet determinism and promethean determinism.³⁵² Puppet determinism is what is described in the previous paragraph, the assumption that everything has a genetic basis and that people are born with most or all of who they are predetermined. Promethean determinism is the future aspect of determinism. It is the assumption that humans will be able to understand fully the human genome and then have complete power over it. Once humans have control over the human genome, they can change it however they see fit and direct human evolution going forward.

Like Prometheus stealing fire from the gods to give to humans, biotechnology in such a framework is seen as something that humans now possess but should not or should not use. This is an extension of the accusation of playing God from earlier, that only God should have the ability to change DNA since everything can be reduced to it. Humans believing they should make the decisions about what can or should be changed are seen as *hubris*, pride. Even though the notion that God alone should be allowed to change

³⁵² Ted Peters, *Playing God? Genetic Determinism and Human Freedom*, 2nd ed. (New York: Routledge, 2003), 8.

humans at the genetic level has been refuted, the issue of pride in biotechnology is not resolved.

Niebuhr identifies four kinds of pride in sin, outlined in the first chapter, and all of these are relevant to the discussion of biotechnology, including possible motivations researchers or people looking to apply the research might have. The first is the pride of power.³⁵³ Some researchers believe that it is just a matter of time before humans are capable of understanding and mastering their genome and thus their future. The second kind of pride is intellectual pride.³⁵⁴ In the context of biotechnology, this pride allows people to forget that humans have been alive for such a short period of time and have had knowledge of evolution and genetics for only a fraction of that time. Humans are finite and do not know everything. This is not a god of the gaps argument, however. The claim that humans will eventually be able to understand everything about creation is intellectual pride. Humans are finite; they have limits and that will inevitable include limits to their knowledge. This is also because humans are temporal.

The third kind of pride is moral pride, that people view themselves as righteous and others not because they do not match the standards that they have and believe they themselves meet.³⁵⁵ Moral pride is compounded through intellectual pride as well as through intergroup bias. The failure to recognize the standard of the ultimate law can lead to terrible decisions in the use of biotechnology. There is a history to eugenics, of trying to control human evolution by controlling who is allowed to reproduce. Biotechnology allows people who view the human race as needing saved or improved the tools to

³⁵³ Niebuhr, *The Nature and Destiny of Man*, 188.

³⁵⁴ *Ibid*, 194.

³⁵⁵ *Ibid*, 199.

continue and further these aims. If gene therapy can alter traits, people who are deemed to have undesirable or deleterious traits could be killed as before, or they could be altered to conform to what others consider normal or advantageous. Even the reasons for pursuing biotechnology can be twisted by moral pride. It is essential to remember that an evolutionary view of creation serves as a reminder that God values diversity and that uniformity would disrupt the harmony God intends.

The final kind of pride, spiritual pride, is an extension of moral pride.³⁵⁶ Spiritual pride arises when humans attempt to link their own standards to God's standards. In the context of biotechnology, it would be any decision that explicitly states a therapy or enhancement is closer to human perfection. Earlier empathy was presented as such an example. The problem is that empathy alone is not enough to ensure adherence to the ultimate law. In fact, increased empathy without adherence to the ultimate law can do greater harm. Torture requires empathy; one cannot torture another effectively without it. People need to be suspicious of those who assure that biotechnology can bring about human perfection.

Biotechnology and Sin as Sensuality³⁵⁷

While it may be easy to identify sin as pride in the pursuit of biotechnology, I would argue that sin as sensuality is just as present, and even precedes pride. Niebuhr makes the distinction between pride and sensuality, and even though he ultimately believes sensuality is related to the love of self that is typified in sin as pride, that

³⁵⁶ Ibid, 200.

³⁵⁷ Parts of this section appear in Molhoek, "Sensuality and Altering Anthropology in Artificial Intelligence and Transhumanism," 99-104.

sensuality is really about the disruption of the harmony within a person, a disordered soul. A person focuses too much on the pleasures of creaturely life and not on God.³⁵⁸

Niebuhr also identifies a tension within sensuality, and each of these aspects is relevant to the discussion of biotechnology, especially the transhumanist quest for immortality. Part of what is sensuality is the reification of the self. Indulging every pleasure to its fullest is a sign of power and an expression of idolatry, something that one is free to do because they have the resources and ability to do so.³⁵⁹ Transhumanists certainly fall into such thinking. There is rhetoric of the right to eternal life and inhibiting the pursuit of this right should be criminalized. And while any extension of life than can be achieved now is welcomed, the ultimate goal is to allow people to achieve immortality when they are at their physical peak. Extreme caloric restriction is currently the only known method for drastically increasing one's life, but I am unaware of any transhumanists who are doing this. Immortality, it seems, is less meaningful without total freedom, to engage in any activity that is pleasure. Sensuality appears to be a core aspect of the transhumanist vision of immortality.

The other part of sensuality is escaping the self. The self is anxious and knows that it should not be the center of existence, and looks to alleviate the anxiety through immersion in that which is not ultimate. Sex is one of the sins most associated with sensuality, and while sexual gratification can be an example of inordinate self-love, it can also be an escape. The self recognizes that it does not deserve deification, but through sexual activity the self can move the deification to their lover. The self does not feel the

³⁵⁸ Ibid, 232.

³⁵⁹ Ibid, 234.

anxiety about being the center anymore, but anxiety can still remain because the other is also not the center of existence. In order to quell that anxiety, one can continue to pursue sexual gratification or drunkenness to escape consciousness.³⁶⁰

The quest for immortality can be understood as an expression of anxiety. If God is not the center of one's existence, and one does not have faith and hope in God's promise for the future, then the future is full of anxiety. In order to combat this anxiety, transhumanism looks to a post human existence, where there can be confidence in the future, because it is controlled by one's self. The goal of immortality or the post-human existence becomes the center of one's life.

Criteria for Proper Use

Biotechnology is neither inherently good nor evil; it is a collection of technologies that can be used for various ends. Earlier in this section, reasons were given for pursuing biotechnology as well as reasons against using biotechnology. In order to provide a more comprehensive or systematic answer to whether particular techniques or ends should be pursued, I propose a set of guidelines to aid in moral deliberations of biotechnology. These guidelines will include both necessary conditions as well as prohibitions. Some of the guidelines draw a sharp line between therapy and enhancement where others blur the distinction or ignore it entirely.

Safety

The first guideline is safety. By safety I mean the safety of research subjects and recipients of developed treatments. Although safety cannot be guaranteed in human trials,

³⁶⁰ Ibid, 240.

terminal patients who test experimental treatments should still have safety risks minimized. Safety is not a groundbreaking guideline, all medical treatments should be reasonable safe, and there should be different thresholds of safety between therapy and enhancement. With life threatening diseases there is a greater sense of urgency and more at stake. Especially in the development of treatments, there should be some room for safe risks. Enhancements, however, are likely not life-saving treatments and therefore should require a higher level of safety. There are always risks involved in medical procedures, but elective procedures such as enhancing one's senses, or intelligence, strength, etc., there should be more stringent guidelines in place to protect patients.

Reversibility

The safety standard for enhancements should be reversibility. What I mean by this is that any enhancement that is made, whether it is mechanical or genetic, should be able to be reversed. This addresses concerns about having sufficient knowledge about that is needed to bring about the change as well as minimizing any negative impacts of a particular enhancement. If scientists are able to both increase the spectrum of light that the eye can see, but also restore the eye to its original functionality, I argue this shows enough understanding of the biological or mechanical mechanism of the enhancement. It also allows people to change their minds if the enhancement is not what they imagined it would be. Tattoos are a permanent change to one's body, and there is a growing industry around tattoo removal. People believe that they want something, but they may change their mind.

Human/Post-Human Flourishing

Therapies and enhancements should contribute to human flourishing. Therapies that restore health improve the creaturely aspect of human nature and sometimes the transcendent aspect of human nature as well, depending on the condition. Enhancements are permissible as well provided they contribute to human flourishing. If transhumanists accelerate evolution to the point of speciation, where one or more species form, enhancements should also conform to their understanding of flourishing. Flourishing for post-humans would likely be different than flourishing for modern humans because flourishing is tied to anthropology and post-humans could be quite distinct from modern humans in terms of anthropology.

It could be argued that requiring enhancements to contribute to human flourishing is too stringent, that enhancements should not need to be beneficial, just not harmful. In bioethics, two of the fundamental principles are beneficence and nonmaleficence. Nonmaleficence, or not doing harm is far less stringent than beneficence. It is easier to not harm everyone than it is to actively help everyone. In terms of human enhancement, if enhancements that did not contribute to human flourishing but did not hinder it were permissible, the number of allowable enhancements would increase. While I could be convinced over time to weaken this constraint, I believe that initially, at least, that enhancements need to be confined to things that will promote or contribute to human flourishing. If enhancements become more ubiquitous and are safe, an argument from human freedom would likely be sufficient to allow additional enhancements.

Accessibility

With any new kind of treatment, there are questions of social justice. It takes time and money to develop tests and treatments and companies rightfully expect to recoup

these costs and generate profit from successful treatments. On the other hand there are people who are in desperate need of these treatments who may not be able to afford them. Companies need to find ways of making gene therapy or other forms of therapy accessible to as many people who need it.

Enhancements raise additional questions of justice because they are not necessary, but their use could provide individuals with additional advantages. Since enhancements would be elective, they would likely not be covered by insurance, allowing only a small subset of the population to afford them. Artificially increasing intelligence or strength could make these people more desirable for certain tasks, possibly increasing their earning potential and increasing income discrepancy. Scholars of distributive justice refer to one's inherited traits as the genetic lottery, and in light of this I would propose a lottery for enhancements until they are affordable to a majority of people.

Longer Lives, Not Immortality

Finally, I would argue that life extension is good, but immortality is not. From a Christian theological perspective, immortality in this life would interfere with the ultimate good of union with God. Spending more time with loved ones and do contribute to human flourishing are goods and should be reasonably pursued, but they are not the ultimate good so there needs to be some limit placed on how long life can be extended. Humans are finite beings, and doing away with biological death could alleviate some suffering, but would lead to other problems. If everyone alive today could live indefinitely and still be able to reproduce, humans and post-humans would consume all of the resources on this planet, potentially ending all life that is currently known. Such an existence would not be sustainable. Attempting to live forever also represents a lack of

faith and hope. Humans have anxiety about death, but attempting to alleviate that anxiety through their own actions, without God, and even contrary to what God desires is the quintessentially definition of sin.

Conclusion

In this dissertation I placed Reinhold Niebuhr's theological anthropology in conversation with insights from the natural sciences as well as the theology and science dialogue, and this conversation led to changes in theological ethics as well. In response to the criticisms Niebuhr had regarding the way the other theologians of his time handled scientific information I proposed that the theology and science dialogue is a fruitful conversation partner because the field addresses his concerns. Additionally, Niebuhr's anthropology requires input from the sciences to help flesh out the creaturely aspect of human nature. Examining feminist critiques of Niebuhr's understanding of sin also highlights the importance of elements of my project. Plaskow criticizes Niebuhr for not giving enough attention to the positive aspects of human nature. I agree with this critique but try to address it in my examination of Niebuhr's understanding of original righteousness, identifying components of original righteousness that could be connected to human biological history. The second element is the problem of self-sacrifice. The kind of self-abnegation that Plaskow says Niebuhr's doctrine of sin leads to does not have to be the case. If Niebuhr is interpreted in a virtue ethics framework, then self-abnegation can never be allowed; it is a vice of deficiency, on the opposite end of the excess of self. Humility or accurate self-assertion would be the virtuous mean between these.

In the second chapter, I follow the example of Robert Russell and identify an aspect of human biological history that could contribute to Niebuhr's understanding of original sin, including his famous phrase about sin being "inevitable but not necessary." With Niebuhr's rejection of an historical fall, finding consonance between the origins of sin in humans and evolution is easier, but by no means simple. Niebuhr's doctrine of

original sin has much in common with Augustine, but between modern biblical scholarship and a nonhistorical fall, Niebuhr's doctrine has distinct differences from Augustine. I believe it is possible that sin predates the evolution of modern *Homo sapiens*, but to delve into the details of this would be a future project. Intergroup preference/bias is the biological anchor I land on. Preferring the company of one's ingroup is not inherently problematic, but it is also unsurprising that this leads to a vilification of the outgroup. This also has implications that were explored in the final chapter.

Original righteousness is a slightly more complicated doctrine for Niebuhr, and I was only able to take the first steps in the conversation with the natural sciences. Cooperation and empathy are necessary but insufficient conditions for the development of self-transcendence which is essential to original righteousness. Niebuhr blurs the lines between the two aspects of human nature slightly, and argues that the ultimate moral standard for humans lies in the theological virtues. Because human reason is affected by sin, even though human nature is not totally depraved, specification of the law cannot be done individually, but must be done in community. This assertion is problematic given the reality of original sin, and the issue of intergroup bias. Original sin and original righteousness are bound together and one cannot speak of the latter without engaging with the former.

In the final chapter, I take the insights from the previous three chapters and apply them to three specific issues. The first is a set of methodological concerns in virtue ethics. Original sin can affect how people determine the virtuous mean, so I suggest modifying Aristotle's guides for finding the mean and adding one about recognizing where the

barycenter is. There is also the question of genuine friendships. Forming genuine friendships with people who are similar is not unexpected, but can lead to problems when coupled with intergroup bias. Additionally, with the specification of the law occurring in community, intergroup bias can lead to intergroup myopia. The second issue is environmental ethics. Given the importance of relationships for the perfection of human nature, I argue that humans need to be more aware of how they are treating other organisms. I explore the notion of friendship with other species, using Aristotle's categories of friendships. I posit the possible potential of genuine friendships with other species, with numerous caveats. I also suggest a new metaphor to replace stewardship: humans as trustees. Humans can receive some benefit from administering the trust, but creation was a gift God gave to all of creation, so humans acting as trustees means acting in ways to ensure the long term success of creation.

The third issue is that of biotechnology. Genetic engineering allows humans to make changes more rapidly than ever before. There is the potential of altering the biological aspect of human nature through the use of technology. There are valid reasons for pursuing research and application in biotechnology, but there are also reasons for pause. Some of the motivations for certain kinds of research or outputs can be traced to sin as pride, but it is also possible to identify motivations that are linked to sin as sensuality as well. In the end I suggest potential guidelines for determining what kind of work should be pursued.

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