THE GENESIS AND ECOLOGY DEBATE

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by

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Abstract

This thesis provides a critique of representative authors in "the Genesis and ecology debate," which began with the 1967 publication of Lynn White's "The Historical Roots of our Ecologic Crisis," and continued among authors from various fields who discussed the creation texts in Genesis 1 to 3 and their relevance to modern-day ecological concerns. It also demonstrates White's influence on Christianity's understanding of ecological matters, and reveals that the Genesis and ecology debate was not merely about the interpretation of certain biblical texts, but about Christianity and its relevance to the current ecological situation.

Chapter 1 introduces the Genesis and ecology debate and defines the parameters of the thesis. Chapter 2 discusses authors in the debate who are neither biblical scholars nor theologians, and whose professional interests would normally be considered outside of the exegetical arena. Chapter 3 deals with biblical scholars who have philological and textual expertise, and who also have some understanding of environmental matters. Chapter 4 examines the writings of Christian theologians who attempt to relate the biblical creation stories to the contemporary ecological situation. Chapter 5 summarizes and concludes the study. The Appendix outlines poet Daniel Quinn's contribution to the Genesis and ecology debate.

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Chapter 1
The Genesis Creation Stories and Ecology Today

1.1 The Great Jubilee

Christian denominations and social justice coalitions worldwide have declared the years 1999, 2000, and 2001 a celebration of the Great Jubilee, calling on churches and society generally to live out the principles of jubilee as found in the twenty-fifth chapter of Leviticus. Each of the three years is focused around a particular theme found in Leviticus. The first theme is "release from bondage," with a particular emphasis on international debt. The second theme is "redistribution of wealth," with a particular emphasis on bridging the gap between the extremely rich and the extremely poor. The third theme is an ecological one:

> The Jubilee also calls for *renewal of the Earth*. Land is to be neither sown nor harvested; only what is needed for food for the household and animals could be gathered (Lev. 25: 107). In the command of rest for the land, we see the desire of God to protect the Earth itself from exploitation. This time of rest and regeneration, so central to Jubilee, also acknowledges that God is at the heart of the people's life together, that God gives all that is necessary for communal life in the land, and that to unceasingly pursue prosperity by relentless working of the land, animals, slaves, or oneself is idolatry (Lev. 25: 11-12, 29-55).[1]

Through the call to jubilee in Leviticus, society is called to ecological responsibility.

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[1] Canadian Ecumenical Jubilee Initiative, A New Beginning: A Call to Jubilee (Toronto: Canadian Ecumenical Jubilee Initiative, 1998), 10.

The Canadian Ecumenical Jubilee Initiative (CEJI) considers this ancient biblical text to be of immense importance to today's context of environmental deterioration:

> A Jubilee vision inspires us to imagine alternatives to the conventional "solutions" which are failing humanity and the Earth. . . . It responds to a people and an Earth craving rest, seeking a halt to the race of competition, success, and progress. It speaks not just to personal redress, or even individual needs, but to communal – even ecological – restoration. Jubilee emphasizes the need for fundamental change to restore balance and equality to human society and the Earth. The Earth belongs to God; our task is to live justly as caregivers of it and of each other.[2]

In the pages of the Christian Bible, the impetus for change can be found for a world desperately needing a change in humanity's understanding of its relationship to the earth.

1.2 Ecology and Genesis

A theologian providing biblical reflection for CEJI notes that there has been much debate over the relevance of Christian Scriptures to the ecological crisis, especially concerning interpretations of the Genesis creation stories:

> While many of the Psalms, Job, the Jubilee texts, and the Gospels evidence belief in a God who cares for all the Earth, there is little doubt that the first chapters of Genesis have served as a basis for many who have tried to theological justify [*sic*] human domination of other creatures. Yet, two texts in the first chapters of Genesis [Genesis 1:28 and the first

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[2] Canadian Ecumenical Jubilee Initiative, New Beginning, 11.

> part of Genesis 2] can help us to gain a new appreciation for the biblical foundation for a deep respect for Earth.[3]

There is much in the biblical texts that can contribute to an ecological theology, though the Genesis creation stories in particular have not always been interpreted as such.

Though the theologians contributing the CEJI material are aware of the historical controversy the Genesis creation stories has caused, it is unlikely that the common, church-going Christian at the beginning of the twenty-first century would see anything unusual about discussing ecological matters in a Christian context, or deriving an ecological theology from the Bible. What this church-goer might not know is how much the popular understanding of Genesis 1 to 3 has changed over the last 35 years.

1.3 The Beginning of a Debate: Lynn White, Jr.

On 10 March 1967 the journal *Science* published an article by the historian Lynn White, Jr., entitled "The Historical Roots of Our Ecologic Crisis," in which he stated that Western Christianity, and specifically its creation texts in Genesis, bear a huge "burden of guilt" for the ecological crisis.[4] The reaction to that article initiated a debate among scholars from different fields that, in turn, has

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[3] Mark Hathaway. "Returning to the Way of Blessing: Reflections on Jubilee and Ecology" in Making a New Beginning: Biblical Reflections on Jubilee (Toronto: Canadian Ecumenical Jubilee Initiative, 1998), 54.

[4] Lynn White, Jr., "The Historical Roots of Our Ecologic Crisis," Science 155 (10 Mar. 1967), 1206.

revolutionized Christian thinking about the natural world.

Admittedly, White was not the first to write about the Bible and ecological concerns. For example, Paul Santmire, writing in 1970, cites several earlier works on the subject, one dating back as far as 1946.[5] Nevertheless, as Santmire concludes, "'nature' as a theme with its own import has not directly concerned most biblical scholars to this very day."[6] Similarly Frederick Elder, in 1972, names a few theologians who discussed the theme of nature in the Bible between 1962 and 1967, though he says that 'those who speak in this way are still more or less isolated individuals. There is no 'school' of environmental theology."[7]

The amount of attention White's article received from authors who wrote after 1967 points to "The Historical Roots" as a sort of landmark in the debate. One of the most recent books written on the topic of theology and ecology, Ronald Simkins' Creator and Creation, begins with a section on White's article and its influence on biblical scholarship.[8] Cameron Wybrow, writing in 1991, attacks the authors he calls the "mastery writers" — those who, like White, believe that the Bible and Christianity were responsible for modern science and

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[5] H. Paul Santmire, Brother Earth (New York: Thomas Nelson Inc., 1970), fn.1, 208.
[6] Santmire, Brother Earth, 81.
[7] Frederick Elder, Crisis in Eden: A Religious Study of Man and Environment (Nashville: Abingdon Press, 1972), 93.
[8] Ronald Simkins, Creator and Creation (Peabody, Massachusetts: Hendrickson Publishers, Inc., 1994), 7-9.

technology, whether they evaluate this connection positively or negatively.[9]

Since White was not the first to write about the connection between the Bible and science and technology, one may question why his article has received so much attention. The consensus among the authors who have studied White and his influences is that, even though earlier authors connected Christianity and its texts to science, White was the first to evaluate this connection negatively. For example, David Hawkin writes:

> And although this [thesis concerning the relationship of Christianity to science] leads some of them, such as White and Rosak, to censure Christianity, others, such as Harvey Cox and Stanley Jaki, see it as a reason to laud Christianity. For Cox, for example, our technological society, with its ability to manipulate and control nature, would not have been possible without the 'cultural prerequisite' of Christianity.[10]

Prior to White, science was seen as the positive product of an advanced human culture. Any connection between science and Christianity, therefore, would have been seen as a positive sign for the Christian faith. White, on the other hand, adds the new awareness of the environmental crisis, caused by technology, science's offspring, to the discussion.[11] Beginning with White, then, science was

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[9] Cameron Wybrow, The Bible, Baconianism, and Mastery over Nature (New York: Peter Lang, 1991), 3-6 and throughout.

[10]David Hawkin, "The Role of the Bible in the Debate about the Ecological Crisis." Theology in Green 4:1 (Jan.-Mar. 1994), 5.

[11]From the time White wrote "The Historical Roots" to the present, there has been much debate over whether there is an environmental crisis, and if so, exactly what the crisis is. Many of the authors studied in this thesis, especially the most recent ones, take for granted that the crisis exists, though a few attempt to describe and explain the situation in detail. White himself describes the crisis in a few lines: "With the population explosion, the carcinoma of planless urbanism, the now geological deposits of sewage and garbage, surely no creature other than man has ever managed to foul its nest in such short order." White, 1204. For more on the scientific debate about the ecological crisis, see Terry L Erwin, "An Evolutionary Basis for

no longer viewed in such a positive light, and neither therefore was Christianity. It is this negative evaluation that caused so much attention to White's article. Writers from many disciplines over the next thirty-some years, as this thesis will illustrate, would respond to White's accusations, either calling Christians to repentance, or defending the faith from its accusers.

Since 1967 a number of authors have taken up the question of the relationship of Christianity and / or the Bible to the ecological crisis. Some of these are perhaps best known for their work on the environmental question (e.g., Santmire), whereas others are well-known writers in other areas who have written on this recently relevant question (e.g., Jürgen Moltmann). Like White, most of these later authors bring the creation stories of Genesis 1 to 3 into their discussion.

1.4 Criteria for Works Studied

This thesis is intended to study the history and development of the Bible and ecology debate, with a particular focus on those authors who have discussed Genesis 1 to 3 in light of the current ecological crisis. For the purposes of this thesis the collective body of writings being studied will be called the "Genesis

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Conservation Strategies," Science 253 (16 Aug. 1991): 750-752; Charles C. Mann and Mark L. Plummer, "The Butterfly Problem," The Atlantic Monthly 269 (Jan. 1992): 47-70; Charles C. Mann, "Extinction: Are Ecologists Crying Wolf?" Science 253 (16 Aug. 1991) 736-38; Thomas Palmer, "The Case for Human Beings," The Atlantic Monthly (Jan. 1992): 83-88; Michael E. Soulé, "Conservation: Tactics for a Constant Crisis," Science 253 (16 Aug. 1991): 744-49; Suzanne Winckler, "Stopgap Measures," The Atlantic Monthly 269 (Jan. 1992): 74-81.

and ecology debate."[12] The works that will be considered will have the following in common: first, all of the works considered here were written in or after 1967, and many of them will refer directly or indirectly at some point to Lynn White's foundational article; second, they will be concerned with the ecological crisis; and third, they will include in their study an examination of the creation texts in Genesis 1 to 3.

What is perhaps most interesting about the Genesis and ecology debate is the wide range of authors who have joined in the discussion. White himself is a historian. Many of the authors who reacted to White's article are theologians and biblical scholars, but this thesis will also be investigating scientists, poets, and philosophers who contributed to the debate. The chapter divisions in this thesis are meant to reflect the great diversity of the backgrounds of the various authors in the debate. Each of the subsequent chapters will study a different set of authors, divided according to their professions and the genre in which they are situated.

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[12] The works studied in this thesis are by no means the sum of the research that has been done in this area in the last thirty-five years. To illustrate, Mitcham and Grote conclude their book with a bibliography, over 150 pages in length, of works directly or indirectly related to the religion and ecology debate. It is hoped, however, that the authors discussed in this thesis will serve as a fair sample of the range of issues within the debate. See Carl Mitcham and Jim Grote, ed., Theology and Technology (Lanham: University Press of America, 1984), 325-502.

1.5 Purpose and Methodology of this Thesis

The purpose of this thesis is threefold. The first is to provide a critique of representative authors in the Genesis and ecology debate. Chapter two will consider authors who are neither biblical scholars nor theologians. These are authors whose professional interests would normally be considered outside of the exegetical arena. This category is placed first because it is in this chapter that Lynn White's foundational article will be considered. Since a great portion of the material being examined refers to White's thesis, White's contribution must be considered first.

Chapter three will deal with biblical scholars who have contributed to the Genesis and ecology debate. These are authors who have philological and textual expertise, and who also have some understanding of environmental matters. This section will consider those authors whose primary concern is to study the text of Genesis 1 to 3, or certain verses or phrases in it, while writing about the environmental question.

Chapter four will examine the writings of Christian theologians who attempt to relate the biblical creation stories to the contemporary ecological situation.

Throughout this thesis, the authors in each category will be considered chronologically in order to demonstrate the development of the debate, the possible influences of the various authors, and the specific issues to which each

author is responding. As each new author is introduced, a few items of relevant bibliographical information will be presented, gathered from the author's work and reviews of that work. Next the work itself will be summarized, compared to other contributors in the Genesis and ecology debate, and finally critiqued.

The second purpose of this thesis is to demonstrate that the Genesis and ecology debate, from beginning to end, was not merely about the interpretation of certain biblical texts, but about Christianity and its relevance to the current ecological situation. Every author who entered the debate did so in order to denounce or to defend Christianity through the medium of a discussion about the Genesis creation texts. Sometimes this theme was hidden, disguised as an attempt simply to discover the true meaning of the Genesis texts. At other times, particularly with the theologians, the motive was more obvious, for theologians have a vested interest in demonstrating the relevance of the Bible to the current context.

The third purpose is to demonstrate the influence of Lynn White's article on Christianity's understanding of ecological matters. Of course, it would be impossible to imagine what the current state of theology would be had it not been for Lynn White. Perhaps another author would have made the same challenge to Christianity that White had. Perhaps Christian theology would have begun, on its own impetus, to consider ecological issues, maybe based on a different biblical text, such as Leviticus 25. But as it is, Christians have spent the

last 35 years trying to understand what the Bible and its theology have to say about ecological matters, and that discussion has been focused around the Genesis creation stories. And that, as this thesis will show, is due entirely to the influence of Lynn White's 1967 "Historical Roots."

Chapter 2
The Non-Religious Studies Sources

2.1 Introduction

Perhaps one of the most interesting aspects of the Genesis and ecology debate is the wide range of professions of the authors who have contributed to it. Many, of course, are biblical scholars, theologians, and church figures from various Christian denominations. There have been many contributions, however, from scholars whose professional training lies outside of the range of what would normally be considered Religious Studies. It is these authors who will be considered in this chapter.

The first purpose of this chapter is to demonstrate that the Genesis and ecology debate began when a historian, Lynn White, Jr., almost accidentally stumbled upon the Genesis creation stories as he searched for the origins of the current ecological crisis. At first, his conclusions were more or less ignored by Religious Studies scholars. Non-Religious Studies authors,[1] however, were quick to pick up on White's theories and began to produce their own works of exegesis and theology. The second purpose of this chapter is to demonstrate the appeal of White's analysis to scholars whose field of expertise would normally be

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[1]The phrase "non-Religious Studies author," though somewhat awkward, will be used in this thesis as a shorthand for "scholars whose professional training lies outside of the range of what would normally be considered Religious Studies."

considered outside of the realm of Religious Studies – namely, that, through a discussion of the Genesis creation stories, these authors find a forum for discussing Christianity and its relevance to the ecological crisis.

2.2 Lynn White, Jr. "The Historical Roots of Our Ecologic Crisis"[2]

The initiator of the Genesis and ecology debate, for the purposes of this thesis, falls into the non-theologian, non-biblical scholar category — the historian Lynn White, Jr., whose 1967 article "The Historical Roots of Our Ecologic Crisis" sparked controversy and debate that has lasted until the present day. White's interest in this subject extends back further than 1967,[3] but it is "The Historic Roots" that begins the debate we will be considering.

White presents his article as a study into the history of the attitudes lying behind ecological change and exploitation. He sees himself as undertaking an almost unprecedented task:

> The history of ecological change is still so rudimentary that we know little about what really happened, or what the results were. . . . I cannot discover that the questions have ever been asked, much less answered.[4]

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[2] Lynn White, Jr., "The Historical Roots of our Ecologic Crisis." Science 155 (10 Mar. 1967): 1203-1207.

[3] For example, John Black, writing in 1969, refers to material in White's 1962 book, Medieval Technology and Social Change, which would later be included in "The Historic Roots." John Black, The Dominion of Man (Edinburgh: University Press, 1970), 67.

[4] White, 1203.

He begins by noting that all life forms have a tendency to alter their environments as they grow, a fact that he illustrates with numerous examples.[5] He goes on to state that humans, more than any other species on the planet, have altered their environment more and more, especially in recent decades, so that the environment itself is now in danger because of human action.[6] Many solutions have been posed to the perceived environmental crisis but none, in White's opinion, are entirely adequate:

> What shall we do? No one yet knows. Unless we think about fundamentals, our specific measures may produce new backlashes more serious than those they are designed to remedy.[7]

Insight into the solution, then, says White, can be gained by exploring the roots of the problem.

For White, the great stepping stone on the path to the ecological crisis was the marriage of science and technology during the middle of the nineteenth century. Before this time, the two were quite separate undertakings: "Science was traditionally aristocratic, speculative, intellectual in intent; technology was lower-class, empirical, action-oriented."[8] Humanity began to alter its environment substantially when passive science began to be applied to active technology. The fusion of the two disciplines became possible in the nineteenth century because of the rise of democracy, which tended to reduce the "social

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[5] White, 1203.
[6] White, 1204.
[7] White, 1204.
[8] White, 1204.

barriers" that separated the two. It is this political change that opened the way to the possibility of environmental crisis:

> Our ecologic crisis is the product of an emerging, entirely novel, democratic culture. The issue is whether a democratized world can survive its own implications.[9]

The marriage of science and technology, made possible by the rise of democracy, is the first root of the environmental crisis.

White digs deeper as he explores the roots of science and technology. He begins by making two somewhat controversial statements. First, all modern science and technology, no matter what their roots or manifestations, are Western, or "Occidental."[10] Second, White states that the origin of the West's leadership in science and technology goes back further than the nineteenth century, even further than the Scientific and Industrial Revolutions of the seventeenth and eighteenth centuries respectively. White finds the beginning of Western science and technology in 800 CE:

> By AD 1000 at the latest -- and perhaps, feebly, as much as 200 years earlier -- the West began to apply water power to industrial processes other than milling grain. This was followed in the late 12th century by the harnessing of wind power. From simple beginnings, but with remarkable consistency of style, the West rapidly expanded its skills . . .[11]

White's list of Western scientific and technological achievements throughout the middle ages continues, from the invention of the mechanical clock in the

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[9] White, 1204.
[10] White, 1204.
[11] White, 1204.

fourteenth century, to the superiority of Western ships, textiles, and glass in the fifteenth century, to the writings of Copernicus and Vesalius in the sixteenth century.[12] Having made these observations, White again turns to the question of the attitudes lying behind modern science and technology, particularly the attitudes of the middle ages where, he states, modern science and technology have their roots.

The dominant attitude lying behind the development of science and technology, according to White, is the perceived separation of humanity from the rest of nature. He illustrates this point with a description of the transition from the use of scratch-plows in seventh-century agriculture, to the use of a more efficient tool that plowed and turned the sods. Scratch-plows were pulled by two oxen, and could prepare a field large enough to support one family. The more complex plow required eight oxen, which very few peasants owned, so the peasants had to pool their resources. The distribution of land had formerly been based on the needs of a family, but with the invention of the new plow land was distributed according to the capacity of the plow. This, says White, resulted in a different attitude towards humanity's relationship to the soil:

> Man's relation to the soil was profoundly changed. Formerly man had been part of nature; now he was the exploiter of nature. Nowhere else in the world did farmers develop any analogous agricultural implement. Is it a coincidence that modern technology, with its ruthlessness toward

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[12] White, 1204.

> nature, has so largely been produced by descendants of these peasants of northern Europe?[13]

For White, then, the ecological crisis has its roots in the marriage of Western science and technology, and technology has its roots in an attitude of humanity's separation from the rest of nature.

This attitude of humanity's separation from nature also lies at the root of the more passive discipline of science. White uncovers the roots of science's attitudes in religion:

> What people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny — that is, by religion.[14]

Because science developed in the West, the religion that influenced its attitudes was Christianity. White cites, as evidence of Christianity's influence, science's origins in natural theology, the belief that God's mind could be discovered through the study of God's creation:

> By revelation, God had given man the Bible, the Book of Scripture. But since God had made nature, nature also must reveal the divine mentality. The religious study of nature for the better understanding of God was known as natural theology. . . . From the 13th century onward, up to Leibnitz and Newton, every major scientist, in effect, explained his motivations in religious terms.[15]

The attitudes of science, then, according to White, have been heavily influenced

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[13] White, 1205.
[14] White, 1205.
[15] White, 1206.

by Christianity, because of science's origins in natural theology. Until the eighteenth century, scientists were motivated to study the world because they believed that they could discover the mind of God.

It is important to note that White does not believe that Christianity's influence on science, or on society as a whole, ceased in the eighteenth century. Though, after Newton, few scientists "explained [their] motivations in religious terms," science's roots in natural theology continues to influence Western thought:

> It has become fashionable today to say that, for better or worse, we live in "the post-Christian age." Certainly the forms of our thinking and language have largely ceased to be Christian, but to my eye the substance often remains amazingly akin to that of the past.[16]

In the West today people do not often speak in overtly Christian terms, says White, but the strong influence of religion on our culture cannot be entirely dismissed.

Because Christianity had such an important influence on the formation of science, science, like technology, is imbued with a sense of humanity's separation from, indeed superiority over, the rest of nature. This Christian attitude, according to White, was inherited from Judaism in the form of the creation stories in Genesis:

> By gradual stages a loving and all-powerful God had created light and darkness, the heavenly bodies, the earth and all its plants, animals, birds, and fishes. Finally, God had created Adam and, as an afterthought, Eve

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[16] White, 1205.

> to keep man from being lonely. Man named all the animals, thus establishing his dominance over them. God planned all of this explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes. And, although man's body is made of clay, he is not simply part of nature: he is made in God's image.[17]

Here, then, for White, is the deepest root of the ecological crisis: the account of the creation of the world in Genesis. This story, which exalts humanity over the rest of creation, gives Christianity an attitude of humanity's superiority over the nature. This attitude was passed from natural theology to science, and then joined with technology, which already had its own sense of humanity's separation from the soil. From that joining-together it was only a short step to the environmental crisis.

White's summary is worth quoting at length, because of its influence on later writers in the Genesis and ecology debate:

> We would seem to be headed toward conclusions unpalatable to many Christians. Since both *science* and *technology* are blessed words in our contemporary vocabulary, some may be happy at the notions, first, that viewed historically, modern science is an extrapolation of natural theology and, second, that modern technology is at least partially to be explained as an Occidental, voluntarist realization of the Christian dogma of man's transcendence of, and rightful mastery over, nature. But, as we now recognize, somewhat over a century ago science and technology – hitherto quite separate activities – joined to give mankind powers which, to judge by many of the ecologic effects, are out of control. If so, Christianity bears a huge burden of guilt.[18]

White was not the first to draw a connection between Christianity and science.

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[17] White, 1205.
[18] White, 1206.

The above quotation, however, contains the innovation which drew so much attention to this historian's writing: Christianity is at the root of science and technology which are, in turn, at the root of the ecological crisis. Science and technology, according to White, are not blessings, but curses — or at least mixed blessings.

It is difficult to say whether White lays the blame for the environmental crisis firmly on either the shoulders of the Genesis creation stories or of Christianity. On the one hand, Genesis, according to White's scheme, is the root of Christianity, just as natural theology is the root of science. He presents his interpretation of Genesis as absolute truth, as if what he says about Genesis is taken directly from the Holy Scriptures. For example, White's statement that Adam's naming of the animals established his dominion over them is an interpretation and, as it will be shown, will be a point of contention among other contributors to the Genesis and ecology debate.

On the other hand, White says that it is "Christianity" that "bears a huge burden of guilt" for the ecological crisis. This does not dismiss Genesis's guilt, but presumably implicates the text in the crime. Still, in White's concluding section to "The Historical Roots," he does suggest a solution to our exploitive attitudes that comes from deep within Christian tradition — the example of Saint Francis of Assisi:

> The key to an understanding of Francis is his belief in the virtue of humility – not merely for the individual but for mankind as a species.

> Francis tried to depose man from his monarchy over creation and set up a democracy of all God's creatures. With him the ant is no longer simply a homily for the lazy, flames a sign of the thrust of the soul toward union with God; now they are Brother Ant and Sister Fire, praising the Creator in their own ways as Brother Man does his.[19]

Noting his amazement that Saint Francis was never declared a heretic, White concludes his article with a proposal that Francis be named the "patron saint for ecologists."[20]

In summary, then, Genesis, according to White, firmly lays down the foundation for an attitude that will lead to the environmental crisis. Christianity is the channel through which this attitude was brought into modern Western science and technology. Christianity is not completely hopeless, though, for in it may be found certain minority strands, such as that represented by Saint Francis, that may provide the attitude needed to counteract the one that has led us to the ecological crisis.

Two important points arise from this analysis of Lynn White's article. The first is that "The Historical Roots" does not present itself as a work of biblical exegesis. Readers may begin to suspect this even before reading the body of the article. A footnote on the first page indicates that White is a "professor of history,"[21] not a biblical exegete.[22] Furthermore, the article is printed in Science, a journal published

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[19] White, 1206.
[20] White, 1207.
[21] White, 1203.
[22] Admittedly, White's profession alone does not prevent him from undertaking a work of biblical exegesis. John Black, the next author to be considered, creates a very thorough exegetical

by the American Association for the Advancement of Science. As readers begin reading the text of White's article, their suspicions are confirmed — the article is primarily intended as a study of the history of science and technology, with a particular emphasis on the environmental crisis.

Admittedly, a study of Genesis occurs in White's article, and is an integral part of his argument, namely that Christianity bears a "huge burden of guilt" for the ecological crisis. In terms of space, however, the analysis of Genesis is only one paragraph in a four-page article. Furthermore, White does not present his study of Genesis as an interpretation of a biblical text, but rather he presents his interpretation as a fact — a historical fact like any of the others that he mentions in his article, such as the invention of the sod-turning plow in the seventh century, or the occurrence of the Scientific Revolution in the seventeenth.

Finally, White considers only a few verses of the Genesis creation stories. Specifically he includes a one-sentence summary of Genesis 1:1-2:4 (the first creation story); a brief mention of 1:26 or 2:7-8 (the creation of Adam), 2:21-22 (the creation of Eve), and 2:19-20 (the naming of the animals); and he notes that Adam was created from the ground (2:7) and in the image of God (1:26-27). He does not mention any of the verses from the creation stories that may count against his argument that Genesis grants humans the right to dominion over the earth. For

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study though he is a professor of natural resources. That White is a historian, though, indicates that he is not necessarily trained in the methods of biblical analysis.

example, he does not quote the statement that God placed Adam in the garden to "till it and keep it" (2:18), a verse that later interpreters will cite to support their claim that humanity is given a position of responsibility, not of domination, in nature. In short, one is left with the impression that White has already decided that Genesis creates the attitude of human domination over nature and then refers to a few verses that support his theory. His study of Genesis is eisegesis, not exegesis.[23]

A comparison of White's analysis of the Genesis creation stories with the work of his contemporary biblical scholars indicates White's lack of awareness of the range of interpretation surrounding Genesis 1 to 3. Admittedly, the brief comment on Genesis 2:19-20 in the 1971 version of the Interpreter's One-Volume Commentary is very much on par with White's interpretation: "By giving the animals their names the man exerts his rule over them."[24] Gerhard Von Rad's 1963 commentary on Genesis contains a similar statement: "Let us remind ourselves once again that name-giving in the ancient Orient was primarily an exercise of sovereignty, of command."[25] For Von Rad, however, this is secondary to a more important meaning of the naming of the animals:

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[23] An argument could be made that White is not attempting an exegesis of the Genesis creation stories but rather is concerned with showing how culture, science, and religion have appropriated the text. If this is his intention, however, it is not clearly stated. For example, he says, "Christianity inherited from Judaism . . . a striking story of creation." Certainly he is concerned with Christianity's interpretation of Genesis, but the story itself is the true root of the attitudes of mastery and exploitation. White, 1205.

[24] The Interpreter's One-Volume Commentary on the Bible (Nashville: Abingdon Press, 1971), 5.

[25] Gerhard Von Rad, Genesis, trans. John H. Marks (London: SCM Press Ltd., 1963), 81.

> So God makes the animals . . . and leads them to the man, and the man takes them and incorporates them into his life. That is what the remarkable passage about the naming of the animals means; we are not dependent for an explanation on the primitive view of the connect between a name and its bearer. . . . This naming is thus both an act of copying and an act of appropriative ordering, by which man intellectually objectifies the creatures for himself.[26]

According to Von Rad, the naming of the animals is, for Adam, primarily an act of ordering and understanding the world, not an act of domination. The act of naming does not separate the man from the animals, or establish his domination over them:

> Here, as in Gen. 1.24 f., one should note the creaturely proximity of man and beast to each other. The animal too is taken from the earth and is incorporated by man into his circle of life as the environment nearest him.[27]

White's interpretation of Genesis, then, is not entirely without precedent, and was probably very much influenced by contemporary biblical scholarship. Nevertheless, it does not sufficiently take into account the whole range of interpretation that was available to him at the time.

The second important point that arises from this study of White's article is that White, in "The Historical Roots," is constantly searching for origins — an undertaking, one may think, consistent with his profession as a historian. He traces the origin of the environmental crisis to the union of science and technology; he pushes back further to science's origins in natural theology; then again back further to Christianity. The deepest "root" of the ecological crisis that White unearths is the

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[26] Von Rad, 80.
[27] Von Rad, 81.

Bible, particularly the Old Testament, inherited by Christianity from Judaism. Once again, as White mentions the Bible, he is driven to find origins — in this case, the Bible's own story of the origins of the world, in the creation stories of Genesis 1 to 3.[28] Here one is left with the impression that, subconsciously or consciously, White is driven towards Genesis by his own methodology, rather than by the content of Genesis itself. It is almost as if White stumbles upon the Genesis creation stories accidentally as he pushes back and back, until finally he comes upon the Bible's account of the very beginning of time and cannot go back any further.

In summary, White's article, "The Historical Roots of our Ecologic Crisis," is a foundational writing in the Genesis and ecology debate. In this work, White places the blame for the environmental crisis on the shoulders of Western Christianity, and specifically on the stories of creation in the book of Genesis. White seems to stumble upon Genesis almost accidentally as, in his search for origins, he ends up discussing the Bible's own account of the origins of the world. He then imposes his own agenda on the biblical text, reading his thesis into the creation stories, rather than attempting to draw a meaning out of the text. He presents his analysis of Genesis as if it were a historical fact, and does not take into account the tremendous

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[28] In focusing upon the Genesis creation texts as the "origin" of the ecological crisis, White is speaking about a cultural origin rather than a historical one, such as the Big Bang theory or something equally scientific. White gives no indication that he views the creation myths as historically accurate. Nevertheless, in his search for origins, he lands upon the Bible's account of the beginning, just as if the commandment to "have dominion" were actually presented to humanity at the beginning of time.

diversity of scholarship done on Genesis by biblical exegetes of his day. This is how the thirty years of debate began.

2.3 John Black
The Dominion of Man: The Search for Ecological Responsibility[29]

The next author to be considered is John Black who, in 1969, was a professor of natural resources at the University of Edinburgh.[30] According to Black's preface, this book is based on lectures he delivered at University College London in February of 1969. Though these lectures would have taken place almost two years after the publication of "The Historical Roots," Black does not quote or refer to White's 1967 article. He does, however, refer to White's earlier book, Medieval Technology and Social Change (1962).[31]

Though Black never refers directly to White's foundational article, his book contains some remarkable similarities to "The Historical Roots." The most relevant of these similarities is that, once Black begins to study the origins of the attitudes that have led to the environmental crisis, he soon turns his attention to the creation stories in Genesis. In his opening chapter, Black notes that, as the awareness of the environmental crisis grew, it became fashionable to lay the blame for the

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[29] John Black, The Dominion of Man (Edinburgh: University Press, 1970).

[30] Black, vi.

[31] Black, 67. Black has written one of the few works in this study that does not demonstrate an awareness of "The Historical Roots." Because of its relevance to the topic of this thesis, its reference to White's earlier work, and its publication during the time frame this thesis is considering, it is included in this study.

deterioration of nature on the shoulders of science and technology.[32] To do so, however, is "sheer evasion." Black writes:

> It is the uses to which science and technology are put, and the attitudes and changes they engender, which must be examined if we are to understand how it has come about that, with widespread and formidable techniques at our disposal, the environment in which we live — and which we have very largely shaped — is not to our liking.[33]

Science and technology are not the problem, and may even be part of the solution. The attitudes surrounding these disciplines are what concern Black. The purpose of Black's work is to uncover those attitudes in western society that have led to the crisis in the natural world, and their origin and development.

Black begins his search into the origins of the typical modern western mindset by listing a number of ancient influences on western thought:

> Many different elements have combined to form the western world-view, assimilated from different sources and at different times. Of these various elements, three are of outstanding importance: Greek philosophy and intellectual method; Hebrew theology and its reinterpretation in Christianity; Roman concepts of law and organization.[34]

Having named these three influences, Black turns his attention, for most of the rest of the book, to the second, which he calls "Judeo-Christianity." He explains that this particular influence on western thought is, of the three, "the one most relevant to our attitudes towards the natural environment, its use and its abuse."[35] A discussion of how Judeo-Christianity has influenced western

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[32] Black, 8.
[33] Black, 8.
[34] Black, 24.
[35] Black, 24.

thought, says Black, "inevitably involves us in the creation legends enshrined in the Book of Genesis."[36] Without further explanation of why Judeo-Christianity is more relevant to the environmental question than other influences, or why he chooses the Genesis creation stories as representative of this tradition, Black begins his analysis of the book of Genesis.

So far Black's book has displayed several similarities to White's earlier article: he begins his discussion of influences on modern western thought by mentioning Christianity, and he immediately turns his attention to the creation stories in Genesis. Unlike White, however, Black demonstrates a greater awareness of the difficulties involved in biblical interpretation. He acknowledges the findings, by biblical scholars, that Genesis was likely edited from a number of earlier sources,[37] and that the actual history that is contained in Genesis and other biblical books is heavily overlaid with tradition and theology.[38] He also notes that there are often discrepancies between the text itself and its historical interpretations, and states that he will attempt to "eliminate the explanatory material accumulated around the original text by subsequent commentators" in order to discern the original meaning of the text of Genesis itself.[39]

In particular, Black points out two difficulties in studying a mythological

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[36] Black, 24-25.
[37] Black, 25.
[38] Black, 26.
[39] Black, 32. In contrast, as noted above, White presents one interpretation of the Genesis creation stories as if that interpretation were equivalent to the text of Genesis itself.

text, such as Genesis, for determining its worldview. The first difficulty is separating what the text says actually happened from the modes of human conduct that it prescribes. According to Black, the stories of creation were originally written to explain things for which the authors had no scientific explanation. As human knowledge increased, the creation stories were interpreted less and less literally, yet their influence remained. Genesis's account of what actually happened is no longer accepted as literal history, and has been replaced by a scientific model which, for Black, is a "more rational and acceptable model of the origins of man."[40] Although the literal historicity of the creation stories can be dismissed as irrelevant to a discussion of Genesis's influence on a modern world-view, the modes of conduct prescribed by the creation stories remain. For Black:

> no advances in scientific theory have, or, indeed, could have, replaced other aspects of Judaic mythology, notably those [modes of conduct] relating man to his environment, such as the idea of man's dominion over the rest of nature, which is still today a central component of western world-view.[41]

The modes of conduct prescribed by Genesis, then, remain influential on modern thought, though the factual, historical elements of the creation stories have been replaced by more scientific explanations of the origin of the world and of humanity.

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[40] Black, 33-34.
[41] Black, 34.

The second difficulty in interpreting Genesis that Black mentions is the ambiguity of the commands given by God. According to Black, the commands concerning human conduct, given to the humans by God in Genesis, probably do not reflect humanity's earliest beliefs about its relationship to the world. Rather, the creation stories were likely written by a fairly advanced culture — that is, one which was already beginning to exercise dominion over nature and to multiply its numbers — which projected its perceived success back into commands given by God at the beginning of time:

> Looking backwards over a period of time, the Hebrew people recognized that a great increase in their number had occurred, and that a continual process of environmental control had accompanied it as the necessary technology had developed. With their concept of history as the working-out of the divine purpose, there could be little difference between God's 'Do this' and His 'This is what will happen': in both ways of expression, man's license is established and it does not alter if it is put across as command or forecast.[42]

Black's interpretation of God's commands, then, is consonant with the Hebraic view of history. Since God knows the future, God's command is essentially the same as God's foretelling of the future. The Hebrews' projecting of their current state into an earlier command by God, says Black, would be nothing more than confirming God's omnipotence.

Black, having set out the framework for his study of Genesis, then proceeds to name specific examples of Genesis's influence on modern western

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[42] Black, 35.

thought. As it was indicated above, it is the modes of conduct suggested by Genesis that have remained influential on western thought, and in particular the commands to have dominion and to multiply: "Whatever changes have come about in the rest of our attitude to the world, *dominion* and *multiplication* have persisted and have indeed been intensified."[43] The influence of these two commands manifested itself in the notion of humanity's superiority over and separation from the rest of nature:

> The result of this view of nature as subordinate to man's requirements has been to set man apart from the rest of nature, in a hierarchical system, God : Man : Nature. Man came to see himself not as part of nature but outside it. . . . The extraordinary complexity of modern environmental technology, and the increasing ability to apply it, for good or ill, to other planets, as well as to the earth, has resulted from the fundamental role in which western man has seen himself as the controller of nature.[44]

Dominion and multiplication, two commands given by God in Genesis, have never lost their influence on western thought, says Black, and lie directly beneath the attitudes that have brought about the environmental crisis.

The harshness of the Hebrew words used in the Genesis commands emphasizes the absoluteness of the dominion that humanity is to exercise. Black argues that the Hebrew word for "subdue" in "subdue the earth" (Gen. 1:28) is used elsewhere in the Bible "for the military subjugation of conquered territory, and clearly implies reliance on force."[45] Therefore, says Black, "subdue" "is a

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[43] Black, 36.
[44] Black, 36.
[45] Black, 37.

very powerful expression of man's attitude to the rest of nature, and suggests that he see himself in a position of absolute command."[46] The choice of such a harsh tone was probably a direct result of the environment in which the Hebrews found themselves when they composed the Genesis creation stories:

> Extremes of weather, both diurnal and seasonal, cause much discomfort and rain comes infrequently; when it does come, it falls, often heavily, on parched soil which is easily eroded. Vegetation is sparse and the soil, once denuded, stays exposed for long periods. It is scarcely surprising that centuries of wrestling with such stubborn conditions found expression in a context of subjugation.[47]

It is also not surprising, for Black, that the influence of such harsh commands would have the results they have had: "Once the limits on dominion were removed, an ecological breakdown was inevitable."[48]

The problem with a society that upholds absolute dominion as a virtue, says Black, is that that society will eventually destroy itself: "The essential paradox remains; dominion over nature is incompatible with long-term sustenance."[49] Perhaps because of a subconscious awareness of this fact, the biblical commands concerning subduing the earth and having dominion, though highly influential, have not always been upheld, even in the West, where their influence has been strongest:

> Having dominion over every living thing that moves upon the earth may be a satisfactory enough concept in theory, but in practice it has not been at all easy to draw a line between two extremes — on the one hand,

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[46] Black, 37.
[47] Black, 37.
[48] Black, 37.
[49] Black, 46.

> hunting and killing an animal for food, or exterminating a pest or a competitor and, on the other, making a friend of a household pet or caring for an injured animal.[50]

Black says that humans often turn away from absolute dominion because of their awareness of a certain "biological relationship"[51] or "obvious biological affinity"[52] with animals. Examples from history when well-respected Christians chose to exercise the opposite of absolute dominion may be found in "the teachings of St Francis, in Schweitzer's principle of 'Reverence for Life', in evolutionary humanism or as an essential component in the rise of the modern conservation movement."[53]

Black says that this ambiguous attitude towards the natural world is so ancient that vestiges of conflicting attitudes may be found in the Genesis creation stories. For example, the fact that there are two quite different and sometimes contradictory creation stories recorded in Genesis suggests this ambiguity:

> In the Priestly version . . . [in] the same verse as that in which man was created, he was given dominion over all those living creatures which had preceded him in the order of creation. In the other (and, significantly, earlier) version . . . [nowhere] is man given dominion over the animals; the only instruction he receives is that, with one important exception, he might eat freely from every tree in the garden.[54]

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[50] Black, 40.
[51] Black, 39.
[52] Black, 40.
[53] Black, 39.
[54] Black, 40-41.

The two creation stories, then, seem to demonstrate different attitudes towards humanity's relationship to the rest of creation: in the first the humans are given dominion over the living creatures, but in the second the human is not even told he is allowed to eat animals. This apparent contradiction indicates that the feeling of ambiguity towards nature is very old:

> . . . I see the existence of these two opposing views of the relationship between man and animals as evidence that the problem is a very old one, and that as long ago as the compilation of Genesis there was sufficient ambivalence of attitude to ensure that both versions had to be put forward.[55]

The ambiguity in Genesis has not influenced the ambiguity we still feel today, says Black, but is an indication that the feeling of ambiguity is very old.[56]

The two opposing attitudes in Genesis towards humanity's relationship to nature are mediated by the concept of responsibility, which can be found in both creation accounts. This concept is most obvious in the second account of creation:

> Man's first duty was to *dress* the garden – that is, to till it, to manage it, presumably for both pleasure and profit. His second duty was to *keep* it. By 'keep' here I understand not *preserve*, in the sense of putting on one side for future use, but *protect*, preventing harm, in the same sense as the word is used in Isaiah, xxvii 3 . . . The burden of the passage in Genesis is clear enough: God put man into the world in order that he should look after it.[57]

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[55] Black, 41.
[56] Black, 41.
[57] Black, 48.

Clearly, for Black, the human is given a position of responsibility in the second creation account.

The idea of responsibility is also conveyed in the first account, when the human is created in the "image" and "likeness" of God. Black notes the different possible interpretations of these words. On the one hand, humanity, being created in the image of God, is in some way separated out from the rest of creation. On the other hand, being created in God's image includes the notion of responsibility:

> Man was also differentiated from the rest of creation in that he alone had the ability to reason, to use his intelligence and to act upon his conclusions. I find myself also drawn to the view that 'Homo imago Dei' equally implies that man is to act in a responsible way in relation to the lower orders of creation, in the same way as God acts towards man.[58]

Even though the concept of "image of God" upholds the hierarchical system of God / humanity / nature, this same hierarchy also creates the sense of humanity's position of responsibility.

The issue, that both the attitude of dominion and that of responsibility are present in the Genesis creation stories, brings an interesting detail concerning Black's thesis to light. If modern western thought is influenced by Genesis, and Genesis contains both of these notions about humanity's relationship to nature, one is compelled to ask why, then, did the attitude of dominion instead of that of

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[58] Black, 49.

responsibility come to dominate modern thought? Black says that, because of Genesis's influence on modern thought,

> harmony within nature, as exists in certain other religions, has never been a lasting ideal to which western man has aspired; it was rather a totally irrelevant concept, and one which probably took hold of western imagination only rarely.[59]

In a later chapter Black makes similar statements about the command concerning human multiplication. An unlimited population explosion could only have taken place in a culture influenced by Genesis:

> Typically, [in other creation myths,] populations rise until famine occurs, when the appropriate God or Gods are petitioned for some relief. . . . Bearing this in mind, it is at first sight surprising to find such a different attitude in the Hebrew world-view, where a continual expansion of population is looked upon as right and proper, even ordained.[60]

The reason for Genesis's different attitude towards population growth, says Black, is related to the history behind the text: "[The] Hebrews did not belong to a stable population : resource system, since they were invaders in a new land, and numbers were obviously crucial to survival."[61] Because the Hebrews needed to increase their numbers to survive among their hostile neighbours, they perceived the need to enlarge their population as a command from God. Again, however, the Bible's attitude towards population growth is not entirely one-sided. For example, the flood story of Genesis 6 to 9 is parallel to a Mesopotamian one

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[59] Black, 36.
[60] Black, 94-95.
[61] Black, 96.

in which the gods bring the flood to "eliminate the rapidly increasing human species."[62] Isaiah and Ezekiel also suggest that infanticide may have been used by the Hebrews as a sort of population control.[63]

The question remains: if, as Black says, our attitudes towards humanity's relationship to the rest of nature have been most strongly influenced by the Genesis creation stories, and Genesis's attitude is not entirely one-sided, then why did one attitude come to be dominant and the other become comparatively rare? Black answers this question subtly in the concluding sentence of his third chapter: "The combination of license and ability provided the justification needed for increasing control and would, if unchecked, lead inexorably to the destruction of the habitable world."[64] The key word in this sentence is "justification." Though, elsewhere, Black insists that "the exploitation of nature by technological means *presupposes* an attitude of dominion,"[65] in this final sentence the opposite is implied: the technology and exploitation came first, and the injunction to "have dominion" in Genesis was later used as a justification of "increasing control," and so on. The proper sequence of events was not attitude of dominion / technology / exploitation, as Black says, but technology / exploitation / justification with the concept of dominion, as he accidentally reveals at the close of the chapter.

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[62] Black, 95.
[63] Black, 96.
[64] Black, 42-43.
[65] Black, 42, emphasis added.

As it was stated earlier, Black's The Dominion of Man is similar in certain ways to Lynn White's "The Historical Roots." The most obvious similarity is that they both focus their investigations into the causes of the environmental crisis on the creation stories in Genesis. White, though, is a bit clearer in his reasons for selecting Genesis. In his article he is searching for origins, and he flows backwards through time quite smoothly from science, to natural theology, to Christianity, to the Bible, and finally to Genesis. Black, on the other hand, lands on Genesis very suddenly and without much explanation. He simply states that he needs to study Christianity to investigate the roots of the modern western worldview, and that he needs to study Genesis in order to understand Christianity. The likely explanation is that Black was influenced by White's earlier association of the modern worldview, Christianity, and the Genesis creation stories.

White's and Black's conclusions about Genesis are remarkably similar, too, despite their differences in approach. White presents only one interpretation of Genesis, and then implicates the creation stories in Christianity's "burden of guilt." Black acknowledges a certain range of interpretation of the Genesis stories, and admits that it contains both positive and negative values concerning humanity's relationship to the environment. In the end, though, Black ignores the positive and blames the commands in Genesis for the attitudes that have led to the crisis in nature.

White and Black both acknowledge certain aspects of Christianity that have gone against the dominant way of thinking and that have provided a certain amount of respect for non-human nature. Both authors mention Saint Francis of Assisi, and Black also adds Albert Schweitzer. In summary then, White's and Black's conclusions are substantially the same: the Genesis creation stories are directly responsible for the attitudes that have led to the ecological crisis, and Christianity, except for a few, rare exceptions, has been the channel through which the ideas from Genesis have been brought to the modern, western world.

Black's study leaves many important questions unanswered: Why is Judeo-Christianity the most relevant influence, of those he mentioned, on our attitudes towards the natural world? Why is it necessary to study the Genesis creation stories, and so little of the rest of the Bible, to understand Christianity? Most importantly, how has Genesis influenced the modern worldview? One of the reasons that Black focuses so much attention on Genesis is the same as it was for White: he is imposing an agenda on the text. In Black's opening chapter, he lists the elements of the modern worldview that he thinks opened the way for the ecological crisis:

> (1) A conviction that man's role on earth is to exploit the rest of nature to his own advantage,
> (2) An expectation of continuing population expansion,
> (3) A belief in progress and history, with an underlying linear concept of time,

(4) A concern for posterity.[66]

In Genesis, Black finds certain elements, phrases, and concepts that correspond with his analysis of the modern world-view. He finds other elements, too — ones that do not correspond to the above list. He conducts quite a thorough exegesis of the biblical text, in fact, but then contradicts his findings by imposing his own agenda on the creation stories.

Another reason for Black's attention to Genesis and the Judeo-Christian tradition may be related to his profession, that of professor of natural resources. The title is unusual, but it is clear that Black is a scientist, somewhat like an ecologist. In the early pages of his book, Black laments over the tendency to blame science and technology for the environmental crisis:

> One familiar reaction to the present situation is to put all the blame for the ills of the world on to science and technology, but this is sheer evasion. It is the uses to which science and technology are put, and the attitudes and changes they engender, which must be examined if we are to understand how it has come about . . .[67]

Later Black makes a similar defense of science:

> The recognition that the use of science to control natural processes has brought the western world to a point when it is beginning to doubt its future survival thus appears to be a criticism of the way in which scientific knowledge has been used in development. . . . The reason is to be found not in science or technology alone, but in the whole complex of ideas on which western civilization is based.[68]

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[66] Black, 21-22.
[67] Black, 8.
[68] Black, 17-18.

In both of these statements, Black seems eager to defend science against accusations that it and its applications have caused the environmental crisis. If one considers this defensive stance, and adds to it the question of why a scientist, undertaking an investigation into the cause of the environmental crisis, would conduct a work of biblical exegesis, one is compelled to conclude that Black is attempting to distract the blame away from his own profession and placing the burden of guilt on someone else's shoulders. The shoulders he selects are Christianity's and those of the Bible's creation stories.

2.4 John Passmore
Man's Responsibility for Nature: Ecological Problems and Western Traditions[69]

The next non-Religious Studies author that will be considered is John Passmore, an Australian professor of philosophy.[70] The reason that Passmore undertakes a study of the Genesis creation stories in his investigation into the causes of and possible solutions to the environmental crisis is clear: because other authors before him have done so: "Genesis will be our starting-point, a Genesis so often assailed as the fount and origin of the West's ecological

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[69] Man's Responsibility for Nature was originally produced in 1973, then republished in 1980. In Passmore's preface to the second edition, he laments the criticism that the first edition received and states that he will attempt to clarify certain aspects of his argument in this new rendition. In order to give Passmore's position the full benefit of the doubt, this thesis will consider the more recent edition of the text. See John Passmore, Man's Responsibility for Nature (London: Gerald Duckworth & Co. Ltd., 1980), vii-xii.

[70] Robert Waller, "Ethics of Conservation," Books and Bookmen 19 (July 1974), 101.

troubles."[71] Of the authors that have already written on this topic, Passmore is particularly interested in critiquing Lynn White, Jr., whose ideas were becoming well-known and generally accepted by the time Passmore began writing Man's Responsibility for Nature:

> According to the historian of science and technology Lynn White, our ecological problems derive from 'Christian attitudes towards man's relation to nature . . .' White's article has become something of a classic, much printed in anthologies. How widely his attitudes are shared, it is difficult to say, but widely enough, I fear, and in sufficiently respectable quarters to demand our close attention.[72]

Passmore introduces his work, therefore, as a continuation of the Genesis and ecology debate, and a polemic against the ideas of Lynn White.

Passmore agrees with White and John Black to a certain degree when he begins his study of Genesis by noting that the creation stories do indeed confer a certain "dominion" on humanity over the rest of creation, and that the traditions that acknowledge Genesis as part of a sacred text have always interpreted them in this way: "This has been read not only by Jew but by Christian and Muslim as man's charter, granting him the right to subdue the earth and all its inhabitants."[73]

The command to have dominion, and the command to multiply, were issued by God before the Fall, but the humans' duties remain much the same

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[71] Passmore, 5.
[72] Passmore, 4-5.
[73] Passmore, 6.

after the expulsion from Eden.[74] The difference in humanity's dominion before and after the Fall is the way in which it must necessarily be exercised:

> The soil, the plants and the animals [before the Fall] all recognised his natural dominion over them. After the Fall, in contrast, he had no choice but to play the tyrant, not only over the animals but over plants and soil. 'Cursed,' God told Adam, 'is the ground for your sake.' A paradisiacal garden no more . . .[75]

Before and after the humans' expulsion from Eden, then, they were to exercise dominion over the rest of nature, but after the Fall the harshness of the world outside of the garden required Adam to exercise his dominion in a tyrannical way.

According to Passmore, parallels to certain elements of the story of the Fall may be found in many ancient creation myths, such as the looking back to an age of perfection and the belief that the world is now somehow wrong because of something that occurred in the past. Unique to Genesis, however, is the notion that humans had dominion over the rest of creation even in Eden.[76] This notion is expressed not only in the direct command to have dominion in the first creation story, but also in the naming of the animals in the second:

> The second story does not go as far as [the first]: it says that [the animals] were created as man's auxiliaries, as 'help meet for him.' But Adam is also represented in that story as giving *names* to the animals. And in primitive thought to have possession of a thing's name is to have power over it.[77]

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[74] Passmore, 6.
[75] Passmore, 6-7.
[76] Passmore, 7-8.
[77] Passmore, 8.

Passmore's interpretation of the naming of the animals, that it is the second creation story's equivalent to the first story's command to have dominion, is in complete accord with White's statement that "Man named the animals, thus establishing his dominance over them."[78]

To this point, Passmore's analysis of Genesis would seem very similar to that of White. White, however, only ever presented one interpretation of Genesis, whereas Passmore, like Black, notices a certain amount of ambiguity in the creation stories concerning humanity's relationship to nature:

> The Hebrews, this much is clear from the Genesis story, were puzzled and disturbed about their relationship with nature. On the one side they were struck by their capacity to domesticate animals, so that one man could govern a herd of oxen. No other living thing had this power; it suggested that man possessed an inherent authority over the beasts of the field. On the other side, they found their own violence and carnivorousness disconcertingly barbarous, standing in need of explanation and justification.[79]

Passmore, like Black but unlike White, does not present one interpretation of the Genesis stories, because he can detect even in the text differing views on the relationship of humanity to nature.

Interestingly, Passmore makes explicit what Black only implies: the Genesis account is a justification of the powers of dominion over nature that had already been achieved:

> By the time the Genesis stories were composed — in Mesopotamia — man had already embarked on the task of transforming nature. In the Genesis

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[78] White, 1205.
[79] Passmore, 7.

> stories man *justifies* his actions. He did not set about mastering the world — any more than he set about multiplying — because Genesis told him to. Rather, Genesis salved his conscience.[80]

Here Passmore begins to indicate how his interpretation of the relationship between Genesis and attitudes of exploitation is different from White's: Genesis did not cause the attitudes of dominion; rather the attitudes created the text.

So far Passmore has agreed with White and Black that the Genesis creation stories confer dominion over the rest of creation on humanity. The point at which Passmore's analysis diverges from that of the two previous writers is the connection he draws between the attitudes expressed in Genesis and the attitudes of the modern west that have led to the environmental crisis. Just as there are multiple voices in Genesis there have been, historically, multiple interpretations of Genesis. Passmore names two such interpretations as they relate to the human-nature relationship:

> There are two possible interpretations, then, of the Old Testament view about man's dominion: the first, that he is an absolute . . . ruler who cares for the world God made subject to him only so far as he profits from doing so; the second, that . . . he takes care of the living things over which he rules for their own sake, governing them not 'with force and with cruelty' but in the manner of a good shepherd, anxious to preserve them in the best possible condition for his master, in whose hands alone their final fate will rest.[81]

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[80] Passmore, 7 (footnote).
[81] Passmore, 9.

The first of these possible interpretations, says Passmore, is what White and his ilk rightly condemn as "Christian arrogance."[82] He disagrees with White, though, when he says that this attitude of arrogance does not necessarily come directly from Genesis, because it is only one interpretation of Genesis.

Though Passmore does not deny that an attitude of "Christian arrogance" exists, he does deny that it came into being as a direct result of the attitudes towards human dominion represented in Genesis. Passmore quotes Mamonides as an example of a "typically Jewish" interpretation of the dominion mandate:

> Genesis makes it perfectly clear, he then argues, that the world was good *before* man was created: 'It should not be believed', he concludes. 'that all beings exist for the sake of the existence of man. On the contrary, all the other beings, too, have been intended for their own sakes and not for the sake of something else.'[83]

Because this "typically Jewish" attitude, one that is quite in opposition to the "arrogant" attitude described above, is a possible interpretation of the Genesis dominion mandate, "Christian arrogance," Passmore argues, is not directly related to God's command in Genesis to have dominion. Christian arrogance is the result of a particular interpretation of Genesis that Christianity could only have made after it was influenced by a number of factors, to be discussed presently.

At times, Passmore seems to equate "Jewish" interpretations of Genesis

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[82] Passmore, 9.
[83] Passmore, 12.

with the actual meaning of Genesis, or at least to suggest that Jewish interpretations are more in line with the actual teaching of Genesis than Christian ones. For example, contrasting the "arrogant" attitude towards humanity's dominion, Passmore says that Genesis teaches that God cares for both humanity and the rest of nature equally:

> Nevertheless, although the Old Testament insists on man's dominion, it is far from suggesting that God has left the fate of animals entirely in man's hands, whether before or after the Fall. In the Garden of Eden, God gave 'every green herb' as food to 'every beast of the earth, and to every fowl of the air and to every thing that creepeth upon the earth'; the green herb, that is, was not created solely for man's use.[84]

As Passmore concludes that "the Old Testament . . . by no means suggests that whatever exists was created for man's sake,"[85] one is left with the impression that he is putting his stamp of approval on Mamonides' interpretation as the "correct" one. It is also possible to interpret Passmore, though, as saying that, since more than one interpretation of Genesis exists, Christian arrogance is not the only possible result of Genesis's teachings.

What, then, for Passmore, are the contributing factors that make Christianity's interpretation of Genesis an "arrogant" one? The first is that Christianity is an anthropocentric religion. The central event in Christian history is the incarnation of their God as a man, an idea that would have been inconceivable in most other religions:

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[84] Passmore, 8.
[85] Passmore, 9.

> For the Jews, as for the Muslims, it is blasphemous to suppose that God could become a man; for many other religions, God was as likely to become a bull, or a monkey, as a man. The peculiarities of Christian attitudes to nature derive in large part from its man-centeredness.[86]

Because of the incarnation of Christ, says Passmore, Christianity has put an emphasis on the superiority of humans since its very beginning.

Some of the New Testament books still reflect an attitude towards the natural world more typical of Genesis and the Old Testament, such as Luke, in which Jesus says that "five sparrows are sold for a farthing, and not one of them is forgotten before God." This, however, says Passmore, only emphasizes Christianity's anthropocentrism:

> God's providential watch over the sparrows is there introduced, however, only in order to contrast it, at least in degree, with his care for men. 'But even the very hairs of your head are all numbered' – as not, presumably, the very feathers of the sparrow.[87]

Even though Luke still retains a hint of the Old Testament's attitudes towards nature, Paul's writings are absolutely anthropocentric, says Passmore:

> Paul is more forthright: citing Deuteronomy's 'Thou shalt not muzzle the mouth of the ox that treadeth out the corn', he asks: 'Doth God take care for oxen?' And the answer, he thinks, is clear. God does not care for oxen, but only for men.[88]

Christianity's anthropocentrism, which shows itself in the New Testament, is one reason for its "arrogant" interpretation of the Genesis dominion mandate.

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[86] Passmore, 12-13.
[87] Passmore, 16.
[88] Passmore, 16.

A second reason Passmore cites for Christianity's arrogant attitude towards nature is the influence of Greek, and particularly Stoic, thought on Christianity. The Stoics, says Passmore, believed that all of nature existed solely for humanity's benefit. He compares a passage from a Stoic writer with one from an eighteenth century bishop and finds their teachings almost identical:

> The Stoic Chrysippus is said to have argued that the flea is useful to man because he wakes the sluggard from his sleep and the mouse because he discourages untidiness. . . . Bishop Berkeley, as late as the eighteenth century, treats the whole of nature as a vast system of signs through which God teaches man how to behave – 'informing, admonishing and directing incessantly, in a most evident and sensible manner'.[89]

According to Passmore, Stoicism and Christianity have this in common: they both teach that all things that exist do so for the benefit of humanity. Those things that do not benefit humans directly, for food or for tools, can still teach humans subtle lessons.

Passmore finds it particularly indicative that Origen, writing in the third century that all things are created for humanity's benefit, cannot find his proof in the Old Testament:

> Origen quotes Psalm 104: 'He causes the grass to grow for the cattle and herb for the service of man.' In that very same psalm, however, the psalmist makes it perfectly clear that God is no less interested in the birds, the wild asses and the young lions, the wild goats and the beavers, than he is in man and his cattle.[90]

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[89] Passmore, 15.
[90] Passmore, 16.

Finding no proof for his theory in the Old Testament, says Passmore, Origen is forced to turn to Stoicism for support.[91]

The influence of Stoicism, though, is not enough to account for the exploitation of nature. Stoic influences gave Christianity the notion that all things were created solely for humanity's use, but this does not lead directly to the belief that humanity should exploit and recreate nature through scientific and technological means. The gap between these two beliefs, says Passmore, is "the West's experience of Christianity, with its emphasis on man's sinfulness and unworthiness."[92] Because of this factor, the doctrine that everything was created for humanity would not encourage the transformation of nature, but rather "quietism."[93] One more factor must be added to the equation before Genesis's indirect relationship to the environmental crisis can be traced.

The missing element, according to Passmore, is Pelagianism. Passmore defines Pelagianism as a humanistic "attitude to man, which sees him not as essentially corrupt but as having the duty to create, by his own efforts, a second nature — identified, in the Christian West, with a second Garden of Eden."[94] This factor needed to be introduced to Christianity before a "scientific-technological revolution"[95] could begin. Passmore says that this element entered Christian

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[91] Passmore, 16.
[92] Passmore, 18.
[93] Passmore, 20.
[94] Passmore, 20.
[95] Passmore, 20.

thought from two directions in the seventeenth century: from Sir Francis Bacon in England, and from René Descartes in France.

Passmore's analysis of Bacon and Descartes' influence is very detailed, but since this thesis is interested primarily in his study of Genesis, a short summary of this aspect of his argument is in order. Bacon wrote that science, applied in technology, is an act of restoring humanity to its dominion over the earth that it enjoyed in Eden:

> He thought of his projects for the advancement of science as restoring man to his prelapsarian dominion over the animals, that dominion which was ceremoniously symbolized when God called upon Adam to give them names. 'It is,' he says, 'a restitution and reinvesting (in great part) of man to the sovereignty and power (for whensoever he shall be able to call the creatures by their true names [i.e. understand them scientifically] he shall again command them) which he had in his first state of creation.'[96]

Descartes similarly believed in humanity's power to recreate a world of perfection, and in doing so, found himself at odds with the Christian belief in human sinfulness:

> But to him, and to his many successors, it is *self-evident* that men should attempt to make the world a better place to live in . . . He ignores, that is, that side of the Christian tradition which insists on man's limitations, on his sinfulness, on his need to humble himself, on the grace he can derive from suffering.[97]

The influence of Bacon's and Descartes' philosophy was the last step towards the ecological crisis. The Stoic influence on Christianity taught only that humanity

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[96] Passmore, 19.
[97] Passmore, 21.

could learn from nature; Bacon and Descartes taught that humanity was obliged to recreate nature.

In short, then, Passmore does argue that there is a relationship between the Genesis creation stories and the ecological crisis, but it is not as direct a relationship as Lynn White and John Black suggest. The attitudes in the west today are influenced not directly by Genesis, but by an interpretation of Genesis that arose within Christianity. Christianity was only able to produce this interpretation after it had been influenced by non-Hebraic (Stoic) thought and a Christian heresy (Pelagianism). Genesis is not to blame for the ecological crisis. There are conflicting attitudes towards nature in Genesis, and there have been conflicting interpretations of Genesis. It is one particular interpretation of Genesis, specifically that put forward by Bacon and Descartes, that led to the attitudes that have resulted in wide-spread ecological damage. One of Passmore's reviewers summarizes the argument succinctly:

> *Man's Responsibility for Nature* opens with a frontal assault on the White thesis. With admirable, unpretentious scholarship, John Passmore argues that the arrogance of Western man toward nature cannot be laid to the teaching of Genesis that God created humankind to "have dominion . . ." The new culprits that Passmore's relentless argument uncovers are Descartes and Bacon. . . . It serves no genuine purpose to have a new set of intellectual scapegoats. But for no other reason than that the author has attempted to disarm the most famous thesis in the ecological debate, this would be a significant book.[98]

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[98] Drew Christiansen, "Making a Habitable World, Straddling a Common Culture," America 131 (28 Sept. 1974), 153.

Passmore's great accomplishment, then, is to shift the blame for the ecological crisis from Genesis to Bacon and Descartes.

Passmore's analysis of the Genesis creation stories and their influence on modern attitudes answers many of the questions that John Black left open. Black, it was noted above, named three important influences on the modern west, then turned to Judeo-Christianity as the most important influence on our attitudes towards nature. Passmore demonstrates that the three strands are not so easily separated: Judeo-Christianity has been heavily influential on our attitudes towards nature, but only insofar as it has been heavily influenced by Greek Stoicism. Passmore would likely agree that Judeo-Christianity has been the most important influence on our attitudes towards nature, but not because of Genesis so much as because of the Stoic and Pelagian influences on Christianity.

Also, Black did not answer the question of why, if Genesis's attitude towards nature is ambiguous, only one particular attitude would become dominant in modern western thought. The answer that Passmore provides is that the Stoic and Pelagian influences on Christianity caused one particular interpretation of Genesis to prevail, if not to arise in the first place.

Man's Responsibility for Nature is concerned as much, if not more, with suggesting solutions to the ecological crisis as it is with uncovering its roots. The solution Passmore suggests is in some ways similar to the suggestions made by

White in "The Historical Roots." Both authors state that a change in fundamental attitudes towards nature is needed — White calls it a search for "a new religion"[99]; Passmore calls it a "new set of moral principles."[100] Similarly, both scholars agree that an alternative to our current attitudes can be found in the modern west's own traditions. Neither would encourage turning to eastern religions or philosophies,[101] and Passmore in particular does not want to abandon western science, technology, or democracy altogether.[102]

Where White suggests the teachings of Saint Francis of Assisi as an alternative view of nature, Passmore recommends something akin to the Jewish interpretation of Genesis that he described earlier. The new set of moral principles based on this interpretation would, first of all, retain the idea of human dominion over the rest of nature:

> . . . [Man] can only live as a predator, whether on plants or animals. And in order to establish a civilization he has to go beyond this point; he has to domesticate herds or plant crops and must so far act as lord and master over at least a segment of nature.[103]

Since humans live as predators, and must cultivate certain crops or animals for food, says Passmore, the concept of dominion cannot be discarded. What must be discarded, though, is the interpretation of dominion that says that all that exists is solely for human use:

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[99] White, 1206.
[100] Passmore, 186.
[101] Passmore, 173; White, 1206.
[102] Passmore, 177.
[103] Passmore, 178.

> At the opposite extreme, 'lordship over nature' is interpreted as entailing that nature is wax in man's hands. Interpreted thus, I have agreed, it must certainly be rejected. Indeed, it was never plausible.[104]

The new moral principles that Passmore suggests, then, include the concept of human dominion, but do not include the Stoic and Pelagian interpretations that western Christianity gave this concept.

Passmore's proposed solutions to the ecological crisis seem to contradict his analysis of the attitudes and influences that led to the current environmental situation. One of Passmore's great criticisms of Christianity, as it was noted earlier, is that it and its interpretation of the Genesis dominion mandate are thoroughly anthropocentric. Passmore's own recommendations, though, are nothing if not human-centred. He says that humanity's purpose on earth is to create civilization, because "that is their responsibility to their fellow-men."[105] Passmore looks for a principle that will prevent human dominion from being interpreted as the right to human exploitation, and what he finds is something akin to the Christian golden rule:

> The traditional moral teaching of the West, Christian or utilitarian, has always taught men, however, that they ought not so to act as to injure their neighbours. And we have now discovered that the disposal of wastes into the sea or air, the destruction of ecosystems, the procreation of large families, the depletion of resources, constitute injury to our fellow-men, present and future.[106]

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[104] Passmore, 178.
[105] Passmore, 178.
[106] Passmore, 186-87.

This principle, says Passmore, can act as our guide to environmental preservation: humans must act with respect towards the environment because it will benefit other human beings and future generations of humans. The rights of nature itself are an illogical and unnecessary concept, says Passmore:

> . . . I treat human interests as paramount. I do not apologise for that fact: 'an ethic dealing with man's relation to land and to the plants and animals growing on it' would not only be about the behaviour of human beings, as is sufficiently obvious, but would have to be justified by reference to human interests. The land which a bad farmer allows to slip into a river did not have a 'right' to stay where it was. The supposition that anything but a human being has 'rights' is, or so I have suggested, quite untenable.[107]

Ironically, Passmore begins his work by condemning the Christian interpretation of Genesis for being "arrogant" because of its anthropocentricity, and concludes by suggesting a "new" ethic that denies rights to anything but humans, and by defending himself against colleagues who have called him a "human chauvinist."[108]

This inconsistency in Passmore's work is the result of a bias directly related to his profession. Passmore is a philosopher, and as such his tools are reason, thought, argumentation — all of those abilities that distinguish humanity from the rest of the natural world. In his concluding chapter he speaks at great length of the unique accomplishments of humanity, which he calls "civilization":

> Were it not for his ability to civilise, man would be no more than a predator amongst the rest, more powerful, more aggressive, more violent,

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[107] Passmore, 187.
[108] Passmore, 187.

> more skillful in capturing his prey but in no other respects superior, and in many respects inferior, to the prey he hunts. And man's great memorials — his science, *his philosophy*, his technology, his architecture, his countryside – are all of them founded upon his attempt to understand and subdue nature.[109]

Humans, says Passmore, are unique in their ability to create civilization, a direct result of their unique powers of reason. It is likely that Passmore puts such value on human uniqueness because he is a philosopher. He is, indeed, as his colleague accused, a "human chauvinist."[110]

Passmore's analysis of the Genesis creation stories is in some ways superior to that of White and of Black. Unlike White, Passmore acknowledges an ambivalent attitude towards nature in Genesis, and multiple historical interpretations of Genesis. Unlike Black, Passmore is able to account for why one particular interpretation of Genesis would become dominant in the modern west. Passmore's analysis, though, is weak in a few instances. First, as it was noted earlier, he tends to equate the Jewish interpretation of Genesis with the actual or correct meaning of Genesis. Second, he has a tendency to proof-text. For example, he refers to Genesis 1:29-30 to demonstrate that God does not leave the fate of the animals entirely in human hands.[111] He backs up his analysis with similar sentiments that he finds in the Genesis flood story, the book of Job, in

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[109] Passmore, 179, emphasis added.

[110] Passmore, 186.

[111] "God gave 'every green herb' as food to 'every beast of the earth, and to every fowl of the air . . .'" Passmore, 8.

Proverbs, Ezekiel, early Christian art, and even Plato's Republic – all quite different texts.[112]

Furthermore, Passmore says that he is seeking an Old Testament philosophy or theology of nature, as if the entire Bible were a consistent whole. He acknowledges the difficulty himself: "There are, of course, problems in talking about 'the Old Testament' as if it were a single book with, in all respects, a single point of view."[113] Having acknowledged that there are different points of view about nature in the Old Testament, especially a conflict between a nomadic and an agricultural viewpoint,[114] he does not address the question any further.

Man's Responsibility for Nature indicates that, by 1973, the ideas that White introduced in "The Historical Roots" were already becoming well-known and well-accepted in certain circles. Passmore sets out to challenge the White thesis in his work. Interestingly, Passmore holds many ideas in common with White, from the beginning of his analysis of Genesis, to the general direction that he suggests for developing a new attitude towards humanity's relationship to the natural world. On the details of his interpretation of Genesis, though, Passmore breaks entirely with the theme that begins in White and is continued in Black,

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[112] Passmore, 8-9. This tendency to proof-text is not necessarily related to the fact that Passmore is a non-Religious Studies author. Subsequent chapters will demonstrate that particularly the theologians, but sometimes also the biblical scholars, tend to proof-text when they write about Genesis and its relationship to the ecological crisis.

[113] Passmore, 12.

[114] Passmore, 12.

namely that the Genesis creation stories are directly responsible for the attitudes that led to the ecological crisis.

2.5 Summary

The first contributors to the Genesis and ecology debate were scholars whose professional training lay outside of the range of what would normally be considered Religious Studies. The debate was initiated by a historian, soon taken up by a scientist, and continued by a philosopher.[115]

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[115] The fascination of non-Religious Studies scholars with the Genesis and ecology debate did not end in the seventies and early eighties with Passmore. For example, in 1988 Armando de la Cruz, a professor of biological sciences, offers a discussion of ecological issues in which he refers extensively to the Genesis creation stories and other parts of the Bible. Armando de la Cruz, "Scriptural Basis of Ecology: A Mandate for Environmental Stewardship," Taiwan Journal of Theology 10 (Mar. 1988): 211-223.

Whereas White was eager to blame Genesis for the ecological crisis, de la Cruz wants to find all the solutions to the environmental problems consistently throughout the Bible. There is no question of whether he is imposing his agenda on the text, for he more or less admits it in his second paragraph: "The aim of this paper is to use scriptural references in harmony with the total message of the Bible which provide us a mandate for the Christian stewardship of our environment." De la Cruz, 212. De la Cruz is not interested in reading the text for a meaning that flows from it. Rather, he wants to pick out verses from here and there that will support a positive attitude towards the environment and encourage ecological responsibility. In short, de la Cruz is more interested in introducing ecological issues to a popular audience than in studying biblical texts. His analysis of the environmental crisis and his call for a change in attitudes is admirable. His biblical analysis is unscholarly and peppered with Christian theological catch-phrases, such as "stewardship," "God's love," "conversion," "simplicity, self-denial, and poverty," "redemption," and "reverence." One is left with the impression that he is simply trying to get the attention of Christians with his occasional scriptural quotation, while his real concern is teaching them about environmental issues.

De la Cruz's work adds nothing significant to the debate. Nevertheless, the existence of this publication indicates the long-standing relationship of non-Religious Studies scholars to the Genesis and ecology debate. De la Cruz enters into the debate late, after the relationship between Genesis and ecology has been discussed by non-Religious Studies authors, biblical scholars, and theologians. To draw together the two areas of biblical study and ecology has already become common, and he does not need to explain the relevance of one to the other. In fact, he can take advantage of this familiarity in order to teach about ecological matters to a Christian audience. For another example of a contribution of a non-Religious Studies author late in the debate, see the discussion of poet Daniel Quinn in Appendix 1.

In studying these authors, what has been revealed is that this debate is not just about a particular interpretation of the Genesis creation stories. What is truly under debate is Christianity – its responsibility in the ecological crisis and its potential to be part of the solution. Black, though disagreeing with much of White's study, arrives at a similar conclusion: that Christianity, in the way in which it has predominantly interpreted the creation stories, is indeed responsible, to a great extent, for the attitudes and practices that led to the current crisis in nature. He eagerly promotes this conclusion because it distracts from the accusations that have been made against his general field of study, science. In White he sees an opportunity to redeem his profession: science did not cause the ecological crisis; religion caused the ecological crisis.

Passmore enters the debate to defend Christianity. He willingly accepts the "burden of guilt" that White and others have laid on Christianity's shoulders, but he says that this has been the result of a particular interpretation of the Genesis creation stories, coloured by non-Christian influences. If Christianity would only pay closer attention to the biblical text itself, Passmore says, a more environmentally-friendly interpretation could arise. Even though Christianity has been part of the problem in the past, it can be part of the solution in the future.

If the debate is really about Christianity's relevance to the ecological crisis, the question arises of why all these authors so quickly turn their attention to the Genesis creation stories in their studies. The answer that comes through in this

chapter is that Lynn White, in initiating the debate, also established the battleground. When White first drew the connection between the ecological crisis and Christianity, he pointed to the Genesis creation stories as proof. The authors who followed were obliged to enter the battle on the terms that White had already set out. All of the authors discussed here define their own contributions to the debate in relation to White's foundational article. This is not merely the result of selection. As the subsequent chapters will show, the debate about the Bible and Christianity's relationship to the ecological crisis is almost always focused around the text of Genesis 1 to 3.

Ironically, it seems that White did not enter into this debate with the intention to blame. He was not trying to shift the blame from one area onto Christianity, as Black was. He certainly did not intend to defend Christianity from accusations of either complicity in the ecological crisis or irrelevance to it, as Passmore did. He simply engaged in a search for origins, a search that led him to what he perceived as the Bible's own account of the origins of the universe.

At first, White's thesis was all but ignored in the world of Religious Studies. As the authors studied in this chapter indicate, however, the connection between the Genesis creation stories and the ecological crisis that White drew soon became well-known to point of taken-for-granted. With the popularization of such ideas, the time had come for the biblical scholars to enter the debate and apply their expertise to the Genesis and ecology debate.

Chapter 3
The Biblical Scholars

3.1 Introduction

The Genesis and ecology debate was initiated by scholars whose professional training lies outside of the range of what would normally be considered Religious Studies. Soon after the debate began, however, biblical scholars were quick to enter into the discussion. Their focus was mainly on defending the Bible against attacks made on it by Lynn White and, later, by his supporters. As the debate continued, however, biblical scholars moved from the defensive to the offensive as they considered not what the Bible does not say, but what the Bible does say about humanity's relationship to the natural world.

Contributions to the Genesis and ecology debate from biblical scholars came in two waves: the first took place in the 1970s, and is represented in this chapter by Donald Gowan and James Barr; the second wave took place in the 1990s, and is represented by Cameron Wybrow and Ronald Simkins.

This chapter has two purposes: first, to examine critically the contributions of biblical scholars to the Genesis and ecology debate, and second, to demonstrate that, as with the non-Religious Studies authors, the biblical scholars used the discussion of the Genesis creation stories not merely to provide an exegesis of the biblical texts, but to engage in a discussion of Christianity's relevance to the current ecological crisis.

3.2 Donald E. Gowan "Genesis and Ecology: Does 'Subdue' Mean 'Plunder'?"[1]

In 1970 Donald Gowan, an associate professor of Old Testament at Pittsburgh Theological Seminary, was the first biblical scholar to enter the Genesis and ecology debate. Because of the popular press coverage the White thesis has been getting, Gowan sets out on a mission to set the record straight about the relationship of the Genesis creation stories to the environmental crisis.[2] Gowan is not willing to accept the "burden of guilt" that has been laid upon Genesis by White and his supporters, and points out that those who blame Genesis for the "environmental mess" are wrong both on their reading of the Bible, and their understanding of history.

Gowan first tackles the question of history. He argues that if Genesis is to blame for the misuse of technology then only those parts of the world that have been influenced by Judeo-Christianity would suffer environmental problems. The evidence, however, denies this notion. He points out that other, non-Judeo-

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[1] Donald E. Gowan, "Genesis and Ecology: Does 'Subdue' Mean 'Plunder'?" The Christian Century 87 (7 Oct. 1970), 1188-1191. His article was printed in The Christian Century in 1970, then ten years later reprinted in a booklet, along with an article on the same topic by Queen's Theological College Assistant Professor of Religion and Ethics Millard Schumaker, and "A Rejoinder" by Gowan: Donald E. Gowan and Millard Schumaker, Subduing the Earth: An Exchange of Views (Kingston: Queen's College, 1980). This study will be concerned primarily with Gowan's original article, though Gowan's and Schumaker's 1980 additions will be considered briefly in the critique.

[2] Only three years after Lynn White's foundational article, his thesis has become well-known. Gowan does not refer directly to White, but he does quote the White thesis ("A popular proof-text on which to blame the environmental mess we are in is Genesis 1:28 . . .") and also mention that it has been reiterated many times, even in popular magazines such as Time. Gowan, 1188.

Christian cultures have suffered "the negative effects of technology."[3] If Genesis caused the environmental crisis, Gowan asks, then why were there environmental problems in ancient Mesopotamia, China, India, and Mesoamerica?

Gowan illustrates an extended example of irrigation methods in ancient Mesopotamia. In Mesopotamia, the annual floods of the Tigris and Euphrates were destructive, so the land could not support a large population without addressing the problem. The Sumerians used technology to irrigate the land, thereby avoiding annual floods, which allowed the population to grow and the culture to develop. This, says Gowan, was a much-needed "victory over [the] environment."[4] On the other hand, long-term use of irrigation technology proved to be the undoing of the Mesopotamian culture:

> Continuing irrigation of poorly drained fields results in an increase (through evaporation) in the salt content of the soil, until at last it becomes nearly sterile. The gradual decrease in yields and eventual disappearance of certain crops have been documented for parts of Mesopotamia from 2600 B.C. on.[5]

The Sumerians' victory over the environment was a short-lived one, as the technology they used for their earlier victory eventually became their undoing. The situation with the Sumerians, Gowan says, is typical of the history of civilized humanity: technology is created to achieve a victory over nature, then that same

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[3] Gowan, 1188.
[4] Gowan, 1188.
[5] Gowan, 1188.

technology causes side-effects which threaten to undo all of the benefits that technology originally created.

Humanity has the right, Gowan argues, to create technology to subdue nature. To deny this, he says, is "to accept the myth of the noble savage (which is a false myth)."[6] If humans had not attempted to achieve such victories over nature, we would have existed as animals: victims to nature's often brutal temperament. With or without Genesis's influence, he says, humanity has "held dominion" over the earth, and has had every right to do so. The reasons he gives to support this argument are both a personal one ("I appreciate being who I am rather than a savage."[7]) and a theological one (a study of the Genesis creation stories.)

Here, the "counterattack" against White and his supporters begins in full force. He argues that White and his followers read the Bible "rather superficially."[8] For example, Frederick Elder glosses over humanity's uniqueness in his attempt to pit the first creation story (the Priestly account) against the second creation story (the Yahwist account).[9] According to Gowan, however, both the Priestly (P) and Yahwistic (J) accounts of creation place humanity in a special position, but in different ways. P demonstrates this special role by

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[6] Gowan, 1188.
[7] Gowan, 1188.
[8] Gowan, 1188.
[9] Gowan, 1188. See Frederick Elder, Crisis in Eden: A Religious Study of Man and Environment (Nashville: Abingdon Press, 1970).

reserving the creation of humanity for the "final, climactic act of creation."[10] Furthermore, the language used for the creation of humanity in P also emphasizes humanity's uniqueness:

> [The] concept of the image of God, and the special blessings [suggest that] not only is man to be fruitful and multiply, like the animals (vs. 22), but he is to be given dominion over all living things. Thus all of life has been created for man's use.[11]

The special emphasis on humanity's creation, then, indicates that humanity is intended for a special role within creation.

According to Gowan's interpretation, humanity's special role is to rule the earth on behalf of God:

> Man, then, is to be God's vice-regent – a conception that can scarcely be stated too strongly. God has given the earth to us to rule; we stand in the place of God for the other living creatures of the earth. We are of a different order of creation, with special privileges and . . . special responsibilities, and the world belongs to us to use.[12]

Gowan argues his point by comparing the biblical "image of God" to an ancient practice whereby a conqueror would erect an image of himself in a land he had subdued as a visible sign of his rulership in that land.[13]

In the J account humanity is the first to be created, which, according to Gowan, "is just another way of emphasizing [humanity's] centrality."[14] The earth is barren at the beginning of the second creation story because there has been

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[10] Gowan, 1188.
[11] Gowan, 1188.
[12] Gowan, 1188-89.
[13] Gowan, 1188.
[14] Gowan, 1189.

no rain, and no worker to till the soil. Gowan concludes, "So man is necessary if even plants are to grow."[15] Creation is not possible without humanity's presence and participation. The first man, says Gowan, is "a kind of royal figure, the king of Paradise."[16]

In both creation accounts, though, Gowan notes that humanity is put under restrictions; human rule over the earth is not absolute. In the first account, humans are given all of the plants to eat, but not the animals. In the second account, the humans are forbidden to eat from one tree – the tree of the knowledge of good and evil. Gowan says, "So it is clear that man has not been given complete freedom to do as he pleases. He is under a divine commandment."[17] Humanity's rule of the earth does not exclude God's rule. Humanity remains under the command of God.

Gowan argues that Genesis 3 speaks most clearly to the environmental situation. In this chapter it becomes clear that humanity and nature are closely related. Specifically, human sin affects nature – "caused childbirth to become painful and the ground to bring forth thorns and thistles."[18] The notion that human sin could affect nature seems "childish" on the surface, but Gowan points out that more people are becoming aware that there is a moral connection

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[15] Gowan, 1189.
[16] Gowan, 1189.
[17] Gowan, 1189.
[18] Gowan, 1189.

between human action and other life on the planet.[19] In fact, the solution to the environmental crisis may be found in the Genesis creation stories themselves. If other writers have argued that the problem with Genesis is its anthropocentrism, Gowan argues that human-centredness could be the key to the solution.

First, he says, Genesis alerts us to the dual nature of nature: nature provides us with everything we need to live, on the one hand, but it is also capable of unleashing forces of death, such as natural disasters. Through the biblical injunction to "have dominion," we are told to continue our efforts to conquer those aspects of nature that are destructive. This we can achieve through increased technology:

> The Bible is acutely aware of the difficulties of overcoming the hostility of nature and wresting from it the essentials for human life, for that is the basic problem men have faced since the beginning of time. Today, thanks to technology, it is a solvable problem in some parts of the earth. We have not yet found a cure for all diseases, but many people now enjoy long and comfortable lives. To this I believe the biblical admonition to subdue the earth says Amen and adds, ". . . . the whole earth for all men."[20]

The human-centredness of the Genesis creation stories can be the solution to the environmental crisis, if we employ human technology towards the benefit of all humankind.

Second, Gowan admits that the Bible has little to say about the harmful side-effects of technology. This is a problem of which the biblical authors were

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[19] Gowan, 1189.
[20] Gowan, 1190.

barely aware. More technology is needed to counteract the negative effects of technology, as well as increased limits on our use of technology:

> But more than technology will be needed if life is to continue; namely, the acceptance of hitherto unimagined controls on the activities of individuals and groups.[21]

Technology is essential to human survival but we must accept firm limits on our use of technology so that we can reap the benefits without causing further damage to the natural world.

Finally, Genesis tells us we must not sacrifice human values in order to save the earth: "If we succeed in maintaining life on this planet only at the expense of all human values, it might be a victory not worth winning."[22] Human values that must be preserved, and indeed increased, are technology, government, and religion. More technology must be applied to environmental problems. More power must be given to the government to put limits on the use of technology. More religion is needed so that the lessons that Genesis has to offer are remembered:

> Far from eliminating the need for religion . . . technology makes religion essential; otherwise it will become a deity ruling us without mercy. For when some men can do to other men what they please and make of other men what they will, the ancient question "What is man?" becomes more urgent than ever before. As we decide how to create humanity's future, whose doctrine of man will prevail if the biblical view is not convincingly advocated?[23]

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[21] Gowan, 1190.
[22] Gowan, 1191.
[23] Gowan, 1191.

Religion, based on Gowan's interpretation of the Genesis creation stories, will provide the necessary limits on the use of technology that are required to avoid further environmental problems.

In conclusion, Gowan says that Genesis's "man-centered approach to nature"[24] is needed to provide a healthy future not only for the earth but also for human civilization. Other writers have proposed solutions that would "do as much harm to humanity as the problems they are intended to solve."[25] If human civilization cannot be saved, says Gowan, the rest of the earth is not worth saving.

The first critique of Gowan comes from his partner, Millard Schumaker. Schumaker agrees with Gowan that Genesis does indeed assign a special role to humanity, but he does not agree with what that role is. Where Gowan says that humanity is to be "God's vice-regent," and "the king of Paradise,"[26] Schumaker says that humanity's role is that of "vassal king [whose] kingship rightly consists in stewardship." The earth is not humanity's to do with as they please, but rather "God's precious possession entrusted to man."[27] Schumaker concludes, "The stories in Genesis make man responsible, in the sense of accountable, to God for the welfare of the earth."[28] Whereas Gowan says that Genesis cares

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[24] Gowan, 1191.
[25] Gowan, 1191.
[26] Gowan, 1189.
[27] Gowan and Schumaker, 18.
[28] Gowan and Schumaker, 18.

only for the rights of humanity, Schumaker says that God is concerned with all of the earth.

In order to argue this claim, Schumaker turns away from Genesis and the Hebrew Bible altogether and looks to the gospels instead: "The lesson to be learned from reflexion upon kingship in general is underscored for the Christian when he thinks on the theological significance of Jesus of Nazareth."[29] In the person of Jesus, Schumaker finds the perfect example of humanity's role on earth, as one who came to serve. Humanity, as the image of God, he argues, is a "servant-king, who sees his dominion to be nothing other than service."[30]

That Schumaker turns away from Genesis to define humanity's role as servant-king is unfortunate, as evidence for Schumaker's point is available in the second account of creation. As Gowan himself makes clear in his original article, humanity's humble role is underscored by the text – that they are to "till and keep" the garden.[31] Though this sort of manual labour may not sound like the work of "the king of Paradise," Gowan interprets the second account of creation in light of the first, where humanity is created "in the image" and in order to "have dominion." Having dominion, in Gowan's interpretation, involves conquering the land so that it will be fruitful.

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[29] Gowan and Schumaker, 20.
[30] Gowan and Schumaker, 21.
[31] Gowan, 1189.

Gowan's 1980 "Rejoinder" to Schumaker, however, does not defend his definition of humanity's role within nature by referring solely to the creation stories in Genesis. He finds examples of God's care only for humanity (and not for the rest of nature, except as it serves humanity) in Psalm 8, Ezekiel 28, Isaiah 14, and Genesis 11.[32] Both Gowan and Schumaker's works imply that the Genesis creation stories themselves are at best ambiguous about humanity's role in relation to the earth. Both authors must look outside Genesis 1 to 3 to reinforce their arguments.

A second critique of Gowan's article is that in it he does not actually propose any substantive change required to solve the environmental problem. What he instead recommends is more of what humanity is already doing: more technology, more government, more dominion, more human-centredness – what Schumaker calls "enlightened self-interest."[33] The only unique contribution he offers is more limits on human use of technology. He admits that the use of technology has side-effects, but he believes that these are separable from technology itself.[34] It simply never occurs to him that technology itself might be the problem.

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[32] Gowan and Schumaker, 28.
[33] Gowan and Schumaker, 24.
[34] Gowan, 1188.

This attitude, that our society is steadily heading towards perfection, is indicative of what Douglas J. Hall calls the "religion of progress." He says that such an attitude is dangerous when it comes to environmental matters:

> The tradition as it has come to us too readily conveys a high conception of the human . . . The appropriate corrective is not a further ontic elevation of Homo sapiens but rather the eneucleation of a Christian anthropology that accentuates human creaturehood and develops its technology in conjunction with a "new" understanding of humanity's vocation within the sphere of creation.[35]

Furthermore, Gowan's article belies more than a professional interest in the Old Testament. He states from the beginning that he is not simply going to lie down and take the abuse that is being heaped upon Genesis by non-professional authors. Because of this bias, his article is strikingly one-sided, and he neglects to consider what role Genesis has indeed played in the environmental crisis. As Schumaker points out,

> it is nevertheless also true that Christian theologians and biblical scholars have often read the stories in Genesis in a way which allows and encourages environmental abuse; and in so doing such theologians have contributed heavily to a mind-set which has reinforced man's natural tendencies toward greed and short-sightedness.[36]

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[35] Douglas J. Hall, Professing the Faith: Christian Theology in a North American Context (Minneapolis: Augsburg Fortress, 1993), 262. To put it in simpler terms, the poet Daniel Quinn compares the idea of progress to being in an early flying machine which is incapable of flight but seems to be flying because it is falling off a very high cliff. When the pilot begins to notice that the ground is rushing up towards him he starts to peddle faster and faster: "And so he starts peddling with all his might. Which of course does him no good at all, because his craft simply isn't in accord with the laws of aerodynamics. Even if he had the power of a thousand men in his legs – ten thousand, a million – that craft is not going to achieve flight. That craft is doomed – and so is he unless he abandons it." Daniel Quinn, Ishmael (New York: Bantam / Turner, 1993), 106-7.

[36] Gowan and Schumaker, 15.

In an attempt to release Genesis from its "burden of guilt," Gowan ignores any possible role the creation stories may indeed have played in the environmental crisis.

Finally, according to Gowan, what is the relationship between Genesis and the environmental question? He states absolutely that the crisis was not caused by the creation stories. He even denies the lesser accusation that Genesis 1:28 has been used as "justification for plundering the earth of its natural resources."[37] He argues instead that Genesis does have the solution to the environmental crisis within its creation stories:

> Moreover, being anthropocentric, the biblical view of man and nature offers a perspective which . . . is not damaging to the concerns of the ecologist, but rather could be the basis for a program to ensure the preservation of fully human life in an acceptable environment.[38]

For Gowan, the Bible gives us a program which consists of two elements. First, humanity is to be the ruler of the earth on God's behalf. This is demonstrated in the creation stories, as humanity is created in God's image, is given dominion over the earth, and is necessary for the fruitfulness of the earth. Second, humanity is to have strict limits on its rulership and use of technology. That humanity's rule is not absolute is demonstrated by the fact that, in the first account of creation, humanity is not allowed to eat animals, and in the second account, they are not allowed to eat from the tree of knowledge.

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[37] Gowan, 1189.
[38] Gowan, 1190.

Gowan's analogy between the creation stories and the ecological crisis, however, is a weak one. In Genesis, the restrictions put on the humans involve food; in Gowan's proposal, the restrictions involve use of technology. How Genesis's food restrictions lead to the belief in controls on use of technology is not immediately clear. It seems as if Gowan has imposed his own theory of humanity and its role within nature on the Genesis text – in other words, that he is justifying his theory by referring to Genesis. He begins by denouncing those who misuse the Genesis text for a scapegoat for the environmental crisis, and in the end imposes his own agenda on the text to create a solution to the same problem. He is so eager to protect the Hebrew Bible that he jumps to the opposite extreme from the one his "counterattack" is against.

3.3 James Barr "Man and Nature: The Ecological Controversy and the Old Testament"[39]

In 1972, the John Rylands Library printed a lecture that was delivered by James Barr, Professor of Semitic Languages and Literatures in the University of Manchester, on January 19 of that year. Reading the article, it soon becomes clear that Barr is addressing a general scholarly audience. He expects them to

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[39] James Barr, "Man and Nature – The Ecological Controversy and the Old Testament," John Rylands Library Bulletin 55 (1972), 9-32.

know, without explanation, that a debate is going on about ecology,[40] but he does not expect them to be as aware of the Genesis and ecology debate.[41] Barr himself is quite aware of the latter, however, and he spends the first half of his lecture summarizing the arguments of those who have said that the ecological crisis has its roots in the Judeo-Christian tradition, and specifically in the Hebrew Bible.

The thesis Barr is arguing against, which has its origins in Lynn White, states that science and technology could only have developed out of the view of nature that is espoused by Genesis. Since the world was created by God, nature is neither divine itself, nor is it "anti-God":

> Modern science . . . could not, according to the theory I am describing, have arisen in a world where nature was regarded either as partaking in the divine or as partaking in evil. . . . [It] is from the demythologization of the world in the Book of Genesis that science ultimately in a historical sense derives.[42]

Furthermore, "biblical religion" describes humanity as being separate from nature and gives them authority and encouragement to govern and control the natural world. The logical result of this authority is human technology.[43] According to

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[40] Barr's opening statement: "It is hardly necessary for me to inform this audience that we live in a time of controversy about ecology, about the balance of the natural environment in which man lives." Barr, 9.

[41] "Now to the average intelligent person it may be far from immediately clear what the Bible has to do with the pollution of the environment." Barr, 10.

[42] Barr, 10-11.

[43] "It is not only a study of what goes on in nature, it is also a taking of control. Technology can thus be thought of as a sort of secular fulfillment of a basic outlook about humanity which was already expressed in Genesis." Barr, 11.

the theory Barr is arguing against, then, science and technology resulted from a mindset and worldview that originated in the Genesis creation stories.

Furthermore, according to this theory, modern science could not have been developed within a Greek worldview, which embodied "static conceptions about nature and history."[44] Only after the philosophy of Aristotle was discarded during the Renaissance and Reformation could modern science be free to progress. This answers the question of why science was so late in developing if its roots were so ancient, as during the Middle Ages the Church in the Western world considered its duty to preserve its Greek and Roman heritage. Only after a break with the Middle Ages (and Greek philosophy and science) was made could modern science emerge.[45]

The great problem in the Genesis and ecology debate, according to Barr, is that historically theologians have encouraged the idea that science was a development of the Christian Church. Barr argues that it is difficult to trace from where the idea originated, but he does suggest one influential voice, that of M. B. Foster. In a series of articles from 1934 to 1936, Foster argued that the source of "un-Greek" ideas that have influenced modern science were derived from the Christian doctrine of creation.[46] Barr also cites several other theologians, such as John Baillie and E. L. Mascall, who supported this theory,

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[44] Barr, 11.

[45] Barr, 11-12.

[46] Barr, 13. Foster's articles appeared in Mind 43 (1934): 446-468; 44 (1935): 439-466; and 45 (1936): 1-27.

and finally concludes that "opinions of this type about the relation between science and the Jewish-Christian traditional faith have become very common."[47] According to Barr, then, the theory that modern science has its roots in biblical religion is not a new one, but has in fact been supported by theologians for many decades.

What is new, according to Barr, is the value placed on that relationship between the Jewish-Christian tradition and modern science. Up until about the time of Lynn White's 1967 article, at a point in history when only the achievements of science were acknowledged, the strength of science was associated with the strength of Christianity and its Scriptures.[48] In the years immediately preceding Barr's lecture, however, the relationship has taken on a negative value. Barr then summarizes White's "Historical Roots" and concludes:

> If science is related to the biblical faith, then the achievements of science may be made to redound to the credit of biblical faith; but by the same argument the pollution crisis and the dangers of damaging the environment can be taken as a discreditable consequence of faults and weaknesses in the Jewish-Christian faith.[49]

In essence, then, the Jewish-Christian faith built its own trap and then stepped into it. Theologians first drew the connection between Genesis and science, and when the tide of opinion turned on the value of science, so did the opinions

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[47] Barr, 14.

[48] "In [this interpretation] the achievements of science and technology are very positively valued, and the relation between science and biblical faith serves to shed some reflected value upon the latter." Barr, 15.

[49] Barr, 15.

change about Genesis and the religions that hold this text as sacred.

Like Gowan before him, Barr fears that this new interpretation of the relationship between Genesis and the ecological crisis is becoming increasingly popular; he cites the frequency with which White's article has been quoted.[50] Therefore he sets out to challenge the assumptions of this theory, particularly the contention that science and technology did indeed derive from attitudes created in the Genesis creation stories:

> The theologians cannot expect to escape from the censure of Lynn White unless they abandon or revise the set of hypothetical connections in the history of ideas upon which he and they alike depend.[51]

If Barr can prove that there is in fact no direct relationship, both the positive and negative values placed on this relationship will no longer be valid.

Barr next sets out to take apart all theories that draw a direct link between Genesis and the ecological crisis. First he asks what the meaning of "the image of God" is. In current thought, he says, humanity mirrors God by exercising dominion over the natural world. This is a logical conclusion because the statement that humanity is created "in the image of God," and the command to "have dominion" appear in the same passage in Genesis 1:26.[52] Barr

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[50] "According to this newer view, then, the ecological crisis reveals a profound fault in the Jewish-Christian religious tradition. It is likely, moreover, that this point of view will be widely influential. Lynn White's article was widely excerpted and reprinted in magazines like Horizon (summer 1967). In general, many of the valuable works now being published on ecology make some comment on the relations of the subject to religion." Barr, 16.

[51] Barr, 18.

[52] Barr, 19.

immediately says, however, that this is not "a probable exegesis." He argues that humanity's likeness to God lies not in their actions but in their being; humanity, in some way, is simply like God:

> The point was not that man had a likeness to God through acting as God's representative towards the rest of created nature, but that he himself was like God. In what way he was like God is not stated; probably it was essential to the writer's position that it could not be stated.[53]

Humanity, in its being, is like God in a way that was not and possibly could not have been stated by the author of Genesis.

Barr reinforces his argument by noting that other uses of the word "image" in Genesis do not support the idea that humanity's image of God is equivalent to their position of dominion. In Genesis 5:3, Adam had a son "in his own image." In Genesis 9:6, at the time of the flood, murder is punishable because humanity is created in the image of God. Barr finds this last instance most telling: "Homicide was to be punished not because man had dominion over the animals, but because man was like God."[54] Use of the word "image" in Genesis, then does not support the idea that being in the image means having dominion.

Having considered the meaning of "the image of God," Barr then studies the meaning of "dominion." He notes that other authors in the Genesis and

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[53] Barr, 20.
[54] Barr, 20.

ecology debate have mentioned the harsh tone of the words used to describe humanity's dominion:

> Thus it is argued that the verb *rada* "have dominion" is used physically of the treading or trampling of the wine-press; and the verb *kabaš* "subdue" means "stamp down". According to Black . . . it "is elsewhere used for military subjugation of conquered territory, and clearly implies reliance on force"; it "is a very powerful expression of man's attitude to the rest of nature, and suggests that he sees himself in a position of absolute command."[55]

On the contrary, Barr argues that the emphasis of dominion is not on humanity's power or exploitative activities. Even though the verb *rādâ* is used to describe the treading out of the wine press, this occurs only in Joel, and is "quite another semantic department" of the verb. "Dominion" is used more generally in the Hebrew Bible to describe any governing, such as the reign of Solomon, which is specifically described as a peaceful one (1 Kings 5:4). As for *kabaš*, it admittedly contains violent overtones of "trampling down" but, Barr notes, this verb in Genesis is used only of the soil, not of the animals. He concludes, therefore:

> I doubt whether more is intended here than the basic needs of settlement and agriculture: man is to fill up the earth, take possession of it, and take control of it. Basically what is intended is tilling; it corresponds with the "working" or "tilling" of the ground in the J story, Genesis ii.5, 15.[56]

According to Barr, then, the harshness of the verbs used to describe humanity's role in creation is a matter of interpretation.

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[55] Barr, 20-21, as printed (without most of the diacriticals).
[56] Barr, 22.

Furthermore, Barr notes that in the beginning humans were told to be vegetarians. Only after the story of the flood (which comes from the P source – the same as the first creation story) are humans given permission to eat animal flesh. At the same time, we hear that human dominion may now cause problems for the animal world:

> In ix.1 there is repeated the command "Be fruitful and increase, and fill the earth", as in Genesis I; but here it is followed, as is not the case there, with the assertion that "the fear and terror of you shall be upon the beasts of the earth". Thus the human "dominion" envisioned by Genesis I included no idea of using animals for meat and no terrifying consequences for the animal world.[57]

The original dominion intended for humanity was meant to include peaceful relationships between the humans and the animals; the "terror" of the animals occurs only after a deterioration in the human condition, "as a kind of second-best."[58]

The relationship between humanity and the animals, according to Barr, is meant as a perfect and ideal depiction of creation. Just as Isaiah 11 envisions an era of perfection in the future where there is peace within creation, so Genesis envisions the same perfection at the beginning of time. In short, Barr's definition of "dominion" is "peace":

> [Genesis] narrates . . . a period when there is peace in the animal world, peace between animal and man, no eating of animal flesh either by man

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[57] Barr, 21.
[58] Barr, 21.

> or by animal, and the whole idyllic scene presided over by man. Man's "dominion" therefore contains no markedly exploitative aspect . . .[59]

Humanity's dominion depends on the maintenance of this peace. Barr says that "man would lose his 'royal' position in the realm of living things if the animals were to him an object of use or prey."[60] Furthermore, Barr says, the corresponding element in the second creation story is the scene in which God brings the animals to the man to name them, because God does so in an attempt to find the man a "helper."[61]

At this point, Barr believes he has succeeded in demonstrating that the Genesis creation stories themselves do not espouse attitudes that would necessarily have led to the environmental crisis. He is forced to admit, however, that such attitudes could have evolved from historical interpretations of Genesis, despite the creation stories' original intentions:

> This may or may not be so; I have not been able to carry out a study of the ways in which Genesis in this regard has been used over a period of many centuries. But I would point out this fact: that until comparatively modern times the dominant Christian theological exegesis was one which connected the image of God in man with man's immortal soul, his reason, his spirituality . . .[62]

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[59] Barr, 22.

[60] Barr, 23.

[61] Barr, 22. Significantly, other authors have interpreted this same scene as an example of humanity's power over the animals. For example, as mentioned in the previous chapter, John Passmore wrote: "But Adam is also represented in that story as giving *names* to the animals. And in primitive thought to have possession of a thing's name is to have power over it." John Passmore, Man's Responsibility for Nature: Ecological Problems and Western Traditions (London: Gerald Duckworth & Co. Ltd., 1980), 8.

[62] Barr, 23.

According to Barr, then, the dominant historical interpretation of humanity's relationship to nature has been its ontological superiority over the other animals, not its practical ability to create technology and exploit nature.

Significantly, Barr says, the Hebrew Bible is not very interested in the origin of technology, or "technogeny," as evidenced in many other Ancient Near-Eastern myths such as the Phoenician legends. A fragment of the "technogeny myth" appears after the Cain and Abel story, where the first people to use musical instruments, bronze, and iron are mentioned. This indicates to Barr that technogeny myths were known to the authors of Genesis, but technology itself was not considered to be of importance.[63] Later in the Hebrew Bible, in the wisdom literature, technology is mentioned, but not as a product of the Hebrew culture or its God:

> Of all the Old Testament material, it is this [the wisdom literature] which expresses a realization of an international and even inter-religious culture. The sort of scientific and technological interests that it reveals are *not* explicitly derived from the specific revelation of God to Israel.[64]

With this statement, Barr returns to his original thesis: that science and technology are not the result of attitudes laid out in the Genesis creation stories. The Hebrew Bible does not claim that the technology the Israelites knew came

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[63] "There is little interest in the development of tools and weapons; nothing of this kind figures in the depiction of the central personages like Abraham. Nimrod the "mighty hunter", possibly also a fragment from an early technogeny, is in the present Genesis characteristically a peripheral figure, lacking any real connection with the story. The prosperity of Isaac as a farmer is reported (Gen. xxvi. 12), but there is no interest in his agricultural methods; the matter belongs rather to the blessing of God which was upon him." Barr, 25.

[64] Barr, 26.

from their God or their culture; technology, if anything, is international and inter-religious.

Here, according to Barr, is the most telling argument against the theory that the origins of science and technology are to be found in the Genesis creation stories. If Genesis built the foundation for modern science, then why did science and technology as we now know it not develop for thousands of years after Genesis was written? Or if they did have an effect in later centuries, why did they have no such effect in biblical times? He says:

> If in fact Hebrew culture contained unique insights, even *in nuce*, which were later to bear fruit in the form of science and technology, one would have expected at least some minimal distinctiveness in point of science and technology to have attached to the material life of ancient Israel. I do not, however, know of any way at all in which such distinctiveness could be argued, whether we look for our facts in archaeology or turn to the Bible's own account of the matter. The material and technical culture was, so far as I know, absolutely continuous with that of Israel's neighbours.[65]

This is the most convincing argument that the Bible's attitudes towards nature did not cause science and technology to be born: the Bible itself says that these were not the invention of the Hebrew people. Therefore, Barr concludes that this "militates, in spite of all possible qualification, against the hypothesis of an integral relation between biblical thought and the rise of science; and the same is true of the doctrine of creation in its developed Christian form."[66]

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[65] Barr, 26.
[66] Barr, 27.

Before Barr turns to his conclusions, he makes one further argument against his opponents in the Genesis and ecology debate. He says that many have assumed that the Genesis creation stories contrast with what was being written at the same time with respect to its non-divinization of nature. Although some argue that nature is in some way divine in other mythic accounts, Barr argues that these assumptions "depend excessively on purely theological and philosophical analysis of what it *must* have been like, too little on expert historical analysis of what it *was* like."[67] That Genesis was unique in its "demythologization" of nature is a fact that has been assumed without proof.[68]

In conclusion, Barr does not deny any responsibility of the Jewish-Christian tradition in the rise of science and technology. Indeed, he believes that Protestantism, liberalism, and humanism may all have played an important role.[69] He does, however, assert that the "Jewish-Christian doctrine of creation is . . . much less responsible for the ecological crisis than is suggested by arguments such as those of Lynn White."[70] Furthermore, he believes that the Genesis creation stories can provide certain insights into our present environmental

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[67] Barr, 29.

[68] Barr also questions whether it would have been impossible to create technology in a culture that believed in the divinity of nature. He cites, for example, the ancient Egyptians, "in whose religion the animal realm was particularly closely associated with the divine, [but who] were able to advance to the building of pyramids in a very brief space of time." The assumption that technology could only develop in a society that has separated nature from divinity is problematic for Barr. Barr, 30.

[69] Barr, 28.

[70] Barr, 30.

situation.

First he notes that Genesis 1 says repeatedly that all of creation is good. He believes this could serve as a "powerful motive for all sorts of action to control and limit exploitation and pollution" of the world. Second, he notes that the world of Genesis is an ordered world. This does not necessarily lead to a belief that the scientific principle of order derived from Genesis, but does indicate that "there is something here in common between the two." Third, the framework of Genesis suggests that humanity is truly human when "he is in his place within nature." This can lead to an interpretation of "dominion" in which "man's dominion or eminence should from now on increasingly be applied to the task of conserving and caring for the natural resources of God's world." Finally, just as the Bible acknowledges that technology is not from God or any one nation, theologians today should release their claims on science, and not use it "to magnify their own religious tradition by representing it as the source of these insights."[71]

Barr's contribution to the Genesis and ecology debate is in some ways very similar to Gowan's. Both authors set out on the same purpose – that is, to launch a counterattack against those who blame the Genesis creation stories for creating the attitudes which led to the environmental crisis.[72] Both Gowan and

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[71] Barr, 31-32.

[72] Though Barr is not as explicit in his intentions as Gowan, his goal is similar, as evidenced by the way he carefully explains the theories he is arguing against; he thoroughly overturns each of the arguments made by his opponents through a study of the significant words

Barr draw similar conclusions insofar as they both advocate responsible use of technology to bring about an end to the environmental crisis. Barr, however, is not as explicit in this recommendation as Gowan. He does not denounce science and technology, but rather draws points of connection between Genesis and science. He also suggests that we "control and limit the exploitation and pollution" of the earth. In this way, he falls under the same criticism as Gowan and the "religion of progress." Barr's strength here, however, is that he does not pretend that solutions to the environmental crisis are to be found in Genesis.[73] Rather, the insights he provides in his concluding section are meant simply to be "relevant to our present situation."[74]

Contrast, for example, Gowan and Barr's proposed ecological solutions with those of V. Steven Parrish. Though Parrish writes almost 20 years after Barr, his biblical analysis is similar in many ways.[75] His understanding of

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"dominion" and "subdue," and his consideration of humanity's relationship to the animals; and he challenges the previously unspoken assumptions of previous authors.

[73] "I am not so naive as to suppose that the Book of Genesis can settle our technological problems of today; and no one, I think, supposes that it can." Barr, 18.

[74] Barr, 31.

[75] A brief note on the first page, introducing the author and his position, states: "An earlier version of this article was presented to the Memphis Ministerial Association on May 15, 1991." In some ways, the entire article has the flavour of a sermon. The points are simply but methodically laid out, often with three-point illustrations, and with frequent reference to Scripture. Parrish's intent may well have been to present a scholarly issue to an audience that was theologically trained, such as a group of clergy, but who were not necessarily aware of current trends in academics. Parrish, in his article, has taken on the task of interpreting the findings of the biblical scholars of twenty years previous, relating them to life experiences, as he does especially in his final section, and making people who are involved in the church, through their clergy, aware of the practical applications of biblical scholarship. If this is so, he may be excused for his over-simplification of his scholarship and his lack of originality. If this indeed was the first introduction to the Genesis and ecology debate that these clergy in Memphis received, it was best that Parrish began in a simple and straight-forward manner. V. Steven

ecological issues, on the other hand, is much more mature, in that his recommendations for a solution to the environmental crisis omit the anthropocentric argument of earlier writers. Gowan openly espoused an anthropocentric solution, and Barr hinted at a similar orientation. Parrish, on the other hand, accepts Sallie McFague's call for a "paradigm shift" away from anthropocentrism towards cosmocentrism, and attempts to break down a hierarchical model of humanity's position in creation and replace it with the concept of interrelationship.[76]

Barr is strong in his biblical analysis, considering for the most part only the Genesis creation texts, and venturing outside of them into the rest of the Hebrew Bible only when it is strictly relevant. For example, he notes that the story of the flood can provide commentary on the first creation story because they are from the same (Priestly) source. He looks to other parts of Genesis and the Hebrew Bible to illustrate the meaning of significant words employed in the creation

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Parrish, "From Domination to Eco-Justice: Rereading Selected Creation Texts in the Hebrew Bible," Memphis Theological Seminary Journal 29 (Summer 1991).

Parrish's unique contribution to the Genesis and ecology debate, though, is his use of Job 38 and 39 as a commentary on the Genesis creation stories. His argument depends on the premise that God ironically invites Job "to take up anew the task originally given humankind in Genesis 1." The argument is not well-made. The only verses he quotes from Job are 38: 4-5: "Where were you when I laid the foundation of the earth? Tell me, if you have understanding. Who determined its measurements – surely you know! Or who stretched the line upon it?" It is difficult to understand how this may be interpreted ironically, or as an invitation to "take up anew the task" of the first humans. Certainly it is not an obvious reading. Parrish, 59.

[76] Following the example of feminists who have reinterpreted biblical texts that have historically been used to justify the subordination of woman, Parrish sets out to reread creation texts "that are frequently used to legitimate harsh dominion of the environment." Specifically, responding to theologian Sallie McFague's "recent call for a paradigm shift from an anthropocentric to cosmocentric focus" in theology, Parrish intends to shift the interpretation of

stories. He looks ahead to the wisdom literature to trace the history of the Hebrews' ideas about technology to determine whether or not the Bible indicates that Genesis produced attitudes that led to the development of technology.

Perhaps the only weakness in Barr's lecture is that it is too concerned with tearing down and too little concerned with building up. Barr is quite successful in providing counter-arguments to all the arguments that have been made to suggest that Genesis is directly related to the rise of science and technology. In the end, though, his positive statements are weak and without much support. For example, he says that, contrary to Lynn White and the like, "the biblical foundations of that doctrine [of creation] would tend in the opposite direction, away from a license to exploit and towards a duty to respect and to protect."[77] He makes this statement without qualification; the reader is forced to piece together information from the rest of the article, about Solomon's peaceful "dominion" and the ideal relationship of humanity to the animals, to validate his point.

Overall, Barr's contribution may be called a well-balanced argument. On the one hand, he admits that science and technology developed within a Jewish-Christian world,[78] and admits that certain developments in Christian history may have helped science to develop, yet he denies that the Christian doctrine of

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creation texts from domination to interrelationship, and to draw a link between creation and justice concerns. Parrish, 53-54.

[77] Barr, 30.

[78] Barr, 18.

creation created the environmental crisis. He acknowledges that part of the problem in the Genesis and ecology debate has been that theologians wanted to make a connection between the Bible and science, but he in the end denies that such a connection ever existed, at least in an obvious and straightforward way. His arguments are all well-made and well-articulated, and his weaknesses in his conclusion concerning the responsible use of technology may be excused as products of his time, 1972, when the understanding of the environmental crisis was still in its infancy.

3.4 Cameron Wybrow
The Bible, Baconianism, and Mastery over Nature: The Old Testament and its Modern Misreading[79]

For about fifteen years after Barr's lecture, biblical scholars fell conspicuously silent in the Genesis and ecology debate. In the 1990s, one of the first significant contributors to this debate by this group was Cameron Wybrow, whose book brought biblical scholarship to a new level in the Genesis and ecology debate. Although Wybrow is not a biblical scholar *per* se, the fact that a full third of Wybrow's book is dedicated to detailed biblical analysis makes his work a fit subject for this chapter.[80]

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[79] Cameron Wybrow, The Bible, Baconianism, and Mastery over Nature: The Old Testament and its Modern Misreading (New York: Peter Lang, 1991).

[80] According to the cover of Wybrow's book, at the time of publication he possessed a Ph.D. in Western Religious Thought and taught Liberal Studies at Brock University.

Wybrow, from the beginning, sets out to challenge what he calls "the mastery hypothesis," and those who teach it, "the mastery writers." He summarizes the hypothesis as follows:

> First, [the proponents of the mastery hypothesis] say, one can observe that the notion that man could or should 'conquer' nature in a thoroughgoing manner is a peculiarity of the West, in fact of the modern West. . . . It seems, then, that what differentiated early modern Europe from contemporary and previous non-mastering cultures must have been the presence of some factor other than brute need or intellectual and technical background. . . . According to the account of these authors, there was such an element: Christianity . . . [which] contained a 'Biblical' understanding of nature and man's relation to it.[81]

In tackling this hypothesis, Wybrow is not arguing against any one particular author. Rather, the position which he counters is formed from "a synthesis of the most convincing arguments of the various authors who affirm it," including Foster, Jaki, Cox, and White.[82]

His composite construction of the mastery hypothesis is composed of eight elements. First, pagan religions, which viewed nature as being alive or divine, created a barrier to mastery of nature. Second, the Greeks failed to achieve the idea of mastery because their philosophy and religion was so similar to pagan animism in their "contention that natural things had ends or purposes." Third, a belief in the influence of the heavenly bodies on human affairs created a fatalism and a cyclical notion of time that limited the belief in human freedom.

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[81] Wybrow, 3-4.
[82] Wybrow, 6.

Fourth, in the biblical view, the world is not sacred or divine, creating an objectification of nature.[83] Fifth, modern physics was made possible when it was realized that no gods would be offended by "the scientist's cold gaze," and that a "mechanical understanding of nature and its workings" could be developed. Sixth, the desacralization of nature in the Bible led not only to science (observation of nature) but also to "technological manipulation of nature" and exploitative attitudes. Seventh, the biblical ideas of "dominion" and "image of God" "pushed the West fully onto the path" towards human mastery over nature. And eighth, modern mastery only developed many centuries after the writing of the Bible because of the need for Christian missionaries to "extirpate the folk 'animism' of the *pagani*," and also because the Reformation purged Western theology of Greek philosophical ideas.[84] This is the position which Wybrow sets out to contradict and replace.

The first section of Wybrow's book sets out to demonstrate in detail that the mastery writers' understanding of "paganism" is severely lacking.[85] The

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[83] Wybrow, 7-13.

[84] Wybrow, 14-20. Or to quote Wybrow's summary directly: "In sum, this is the essence of the mastery hypothesis: Christian civilization, pregnant with the Old Testament notion of an inanimate nature and man's power over it, swept away pagan thought and produced, possibly as early as the later Middle Ages and certainly after the Protestant Reformation, the modern understanding of nature as neutral matter awaiting the command of man." Wybrow, 24.

[85] The problem with the idea of "paganism," according to Wybrow is that it contains religions that are not defined by what they believe, but by what they do not believe; specifically, pagan religions are those that are not Christian, Jewish, or Moslem. Wybrow, 40. Therefore, a wide variety of religious beliefs are contained within the title "paganism." Many of the pagan religions worshipped nature, though many of them did not. Some pagan sources contain attitudes that the mastery writers attribute to the Bible. Wybrow, 41-45. When Wybrow considers why the mastery writers failed in making a thorough analysis of "paganism," he says

second section of Wybrow's work is dedicated to biblical analysis.[86] Wybrow says that the mastery writers' biblical analysis is weak on two accounts. First, they put much weight on only a few passages of Scripture, and second, they pay little attention to the contexts of the passages to which they refer. Wybrow's analysis is intended to compensate for these shortcomings. Specifically, he will seek the answer to two important questions: 1) in what way does the Bible "desacralize" nature, and 2) in what sense does the Bible allow or demand human dominion over nature?[87] This section of his book is composed of two chapters, each of which deals with these two questions.

In the first chapter Wybrow summarizes the mastery writers' position. The Bible's monotheistic insistence on one God states that nature is not God but one of God's creations or artifacts. Therefore, the natural world is neither divine

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that either they thought that the connection between paganism and nature-worship was so obvious that it did not need to be explained, or "it may be that their particular biases make a certain simplified picture of paganism very convenient." Wybrow, 44.

[86] Wybrow confines his study to the Hebrew Bible, rather than exploring the New Testament, mainly because that is what the mastery writers have also done: "[Their] hypothesis tacitly assumes that the core teaching of that [the Judeo-Christian] tradition regarding nature and the place of human beings in it is found in the Old Testament. For them, all the elements necessary for a coherent doctrine of nature and human dominion can be found in Genesis, in Ps. 8, and in the general Old Testament rejection of 'nature worship' as idolatry." Wybrow, 103. Wybrow notes, however, that had the mastery writers considered the New Testament, they would have found that it challenges the mastery hypothesis. The New Testament world of demons and exorcisms contradicts the mastery writers' definition of the biblical view of nature: "The mastery hypothesis, contending that nature became conquerable only when it was conceived of as impersonal matter, cannot explain the rise of scientific medicine in a world in which sickness is believed to be caused by demons rather than by bacteria, and in which Jesus is depicted as something closer to a shaman than to a biochemist." Wybrow, 105. In order to "stay on the mastery writers' own ground," however, Wybrow confines his biblical study to the Hebrew Bible.

[87] Wybrow, 105.

nor sacred. Furthermore, the heavenly bodies are not divine; they serve humanity, they do not rule over them. The sun, moon, and stars, in the biblical view, operate on mechanical principles, not by will. In seventeenth-century physics, this principle was applied not only to the heavenly bodies, but to what we would now call organic forms. Thinkers such as Descartes and Hobbes believed all of nature was "fundamentally 'nothing but' the operations of inert, impersonal matter." This "paved the way for a clear conscience about experimentation on living beings."[88]

Wybrow says that this analysis of the Bible's view of nature is oversimplified. Specifically, he says that what the mastery writers call "desacralization" (though not always by that name) in fact refers to three different principles: de-divinization (taking away the divinity),[89] desacralization (taking away the holiness),[90] and de-animation (taking away the life). The crucial point, according to Wybrow, is de-animation.

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[88] Wybrow, 112.

[89] As to the idea of desacralization, nature was not considered sacred or holy in general in either biblical or pagan religions. In pagan religions, the "very fact that the pagans designated certain groves as 'sacred' implies that other groves were not 'sacred,' were 'profane.'" Furthermore, in the Bible certain places and things were considered "holy," such as Mount Sinai. But in pagan and biblical religion alike, sacredness was not confined to the natural realm: "there were 'holy traditions,' 'holy men,' 'holy ceremonies,' 'holy writings,' 'holy implements,' and so on." These things were holy not by their nature, but because of their demarcation "in the God in whose name the demarcation was pronounced." Since there is no significant difference in pagan and biblical religions' belief in the holiness of things and places, the "term 'desacralization,' therefore, is conceptually inadequate for the mastery writers' claims." Wybrow, 114.

[90] As to the idea of de-divinization, the Bible is quite clear: only God is divine, therefore things are not divine. To make things divine would be idolatry, which the Bible strictly prohibits. There are, however, divine beings in the Bible. The Bible makes an oblique or direct mention of members of God's court (Genesis 1:26, Job 1:6), God's sons (Genesis 6:4), and God's

The Bible places what modern readers might consider animate beings – humans and animals – in a special category. This category is defined by the Hebrew phrases *nepeš hayyâ* (living creature) and *nišmat hayyîm* (the breath of life). Various parts of Genesis (1:20-21, 1:24-25, 2:7, and 7:21-22) make it clear that living creatures, possessing the breath of life, refer to both humans and animals. Living things are distinguished from other items in creation, such as the plants and the heavenly bodies, because they have breath and blood (in Hebrew *dām*). But, Wybrow asks, could other natural objects, that possess neither blood nor breath, be considered animate? Can things such as the plants and heavenly bodies, be non-alive, yet animate?[91]

Wybrow has already noted that the mastery writers use only a very limited number of verses in proving their hypothesis. One part of Scripture that is conspicuously absent from the mastery writers' writings is Psalm 96. Here nature is described in very animate terms:

> Here, nature is treated as if it were alive, in fact as if it were human. It is supposed to recognize and applaud the justice which the Lord brings to the world. And not only a few 'sacred' groves, but all trees, and other natural beings as well, are urged to lift their voices up! Nature is here represented as filled with expectation, vibrancy, and responsiveness.[92]

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messengers (angels) who have some share, albeit in a lesser degree, in divinity. None of these, however, are nature gods: "[They] are not personifications of natural objects or forces, and they are not attached to particular natural beings such as the sea, the air, and so on." The Bible's view of divinity may seem to support the mastery writers' hypothesis. Wybrow, 115.

[91] Wybrow, 116-117.

[92] Wybrow, 119.

Statements similar to those found in Psalm 96 are also found in Psalm 148 and parts of Isaiah.[93]

Wybrow conjectures that the mastery writers would ignore passages such as these because they are simply literary imagery, not to be taken literally. But, he asks,

> does this interpretation of Biblical poetry, which eliminates any *doctrinal* significance from these passages, arise from an open and sympathetic study of the Biblical text? Or are modern prejudices being read back into the Bible . . .?[94]

At least the question casts some doubt on the mastery writers' interpretative methods, especially if one considers that similar statements about the natural world's animate nature are made in the prose sections of the Bible as well.

In Genesis 1, by Wybrow's interpretation, God invites the earth to participate in God's creative activity. In Genesis 4, the blood-soaked ground curses Cain. In Leviticus 18, the land is contaminated by the transgressions of its inhabitants and shares in their punishment. In the Sodom and Gomorrah story of Genesis 18-19, the people's sins infect the land, which is punished with a rain (*māṭar*) of fire, similar to the rain (*māṭar*) of water that destroyed the earth in the flood. That humanity and the earth should be so closely connected is not surprising, says Wybrow. In Genesis 2:7, the man is formed from the ground.

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[93] And, though Wybrow does not mention it, in Psalm 29.
[94] Wybrow, 120.

The similarity of the Hebrew words *'ādām* (man) and *'ădāmâ* (ground) reinforces the connection.[95]

Furthermore, animals are included in the same legal and moral obligations as humanity. In Genesis 6, "all flesh," including the animals, have become corrupted on the earth, which results in God's decision to send the flood. After the flood, the same restriction is put on humans and beasts, requiring a "reckoning" for anyone who takes a human life. In Exodus 21, the law states that an ox who gores a human must be stoned to death. The punishment goes beyond the destruction of a dangerous animal:

> If the ox is to be 'done in' merely because it is deemed dangerous to other humans, any way of killing it will do, and many ways are faster than stoning. But the ox is not to be slain merely upon such pragmatic grounds; it is to be slain because it is guilty of violating one of God's laws, killing a human being. Hence, the formal *legal* punishment, stoning, is appropriate.[96]

In Jonah 3: 7-8, the animals are capable of repenting for their transgressions as well. The inescapable conclusion, says Wybrow, is that "animals can be responsible for their actions," animals may be judged by moral categories.[97]

Humanity's close connection to the earth, and the animals' moral responsibility create what Wybrow calls "great problems for modern interpreters:"

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[95] Wybrow, 121-125.
[96] Wybrow, 126.
[97] Wybrow, 127-128.

> For the Bible, the natural world is 'alive,' or 'animate.' In numerous 'prose' passages, the earth as a whole, certain lands in particular, the soil, vegetation and animal life are depicted as vibrant, sensitive, responsive, and reactive to the good and evil wrought by God and man. They enter into moral and even legal relations. They can be obedient or disobedient to God. These facts confirm the impression drawn from the 'poetic' parts of the Bible, that a quasi-human, moral 'life' pervades all of nature . . .[98]

The mastery writers claim that the Bible eliminates from nature all traces of divinity, holiness, and animation. Wybrow has demonstrated that nature, in the biblical view, is not divine, sometimes holy, but fully animate.

The mastery writers make much of the fact that, in the Bible, the stars, planets, moon, and sun are desacralized. Wybrow considers whether the heavenly bodies are animate. Genesis 1:14-19 says that the heavenly bodies move, but it does not indicate the source of their movement – is it by laws of nature, or by will?[99] But the ability to move is not the only criterion for animation. Something that is animate has the capacity to affect, as well; and surely the heavenly bodies have an effect on humanity.[100] One does not need to guess what the biblical authors thought about the heavenly bodies, though, for one sees evidence in the first Genesis creation story, in that the sun and moon are given a job – to rule over the day and the night. The Hebrew word is *māšal*,

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[98] Wybrow, 128.

[99] Augustine, Wybrow notes, says that in order to satisfy theology the heavenly bodies need only not to be divine; he rejects that they are animate only by reason of observation. Wybrow, 129.

[100] "The Biblical authors could not have failed to be impressed by the sun's ability to light, warm, and revivify the earth. They could not have been unaware of the subtle connections between the phases of the moon and certain changes in weather and in animal and human behaviour. They must have respected the sun and moon as great and important powers. It

which is mainly used in the Bible "associated with the great power and responsibility of kings."[101] One does not need to conceive of the heavenly bodies as gods to appreciate their power and vitality.[102]

Even if the Hebrew Bible desacralized nature, as the mastery writers assert, this would not be enough to lead to the modern idea of mastery, according to Wybrow. "It could be said to have generated an indifferent attitude toward natural objects, but no positive impulse toward mastery."[103] Something else was needed to move from indifference to mastery. That, according to the mastery hypothesis, includes the biblical notions of "dominion" and "the image of God." Wybrow, in the second chapter of this section of his book, sets out to demonstrate that the idea of dominion, as it is described in the Bible, is inadequate as a theoretical basis for mastery.

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would not have been at all unreasonable for them to conclude that these bodies were in some way 'alive.'" Wybrow, 130.

[101] Wybrow, 130.

[102] Wybrow supposes that the mastery writers could respond that their concern is not whether the sun and the moon are animate, but whether they move by will or by natural law. Wybrow replies that the Bible's description of the sun and moon's motions "does not seem sufficiently clear to either establish or disestablish the mastery hypothesis regarding the idea of laws of nature" – the Bible never mentions "laws of nature," but it could lay the foundations on which the laws of nature would later be built. Wybrow, 131. The closest the Bible comes to the notion of a law of nature is in the word *hoq* or its feminine *huqqah*, which designate a decree, ordinance, or fixed order. In Job, Proverbs, and Jeremiah, the motions of the sun and moon and stars are said to be expressions of *hoq*. But *hoq* also refers to human ordinances and "implies the submission of a personal will to commandments rather than the operation of an impersonal necessity." Wybrow, 132. Biblical *hoq*, then, does not seem to be a precursor to modern physic's laws of natures, but could be transformed into such through a "synthesis of Biblical and Greek ideas rather than as a self-unfolding of a purely Biblical idea." Wybrow, 133.

[103] Wybrow, 135.

The mastery writers' basis of arguing that the Hebrew Bible grants humanity the right to conquer nature is found almost exclusively in Genesis 1:26-28. Wybrow summarizes the mastery writers' interpretation:

> Here, says the hypothesis, is a very important picture of a godlike being, the only godlike being in all Creation, a being meant to assume "dominion" over all other living creatures and to occupy and "subdue" the entire earth, taking at will the things that grow upon it for sustenance.[104]

Genesis 1 gives humanity a special status and role within Creation. Psalm 8 helps the mastery writers to define further what Genesis means by "dominion" and "image of God."[105] The mastery hypothesis is based almost entirely on only these two passages of Scripture. Therefore it is important, says Wybrow, to study these two texts, and to study them in their context, which he defines as "at least through the 'primeval history' (Genesis 1 through Genesis 11) and in many ways beyond these chapters into the rest of the Old Testament." It is Wybrow's intention not only to contradict the mastery writers' interpretation of the Hebrew Bible, but also to provide "a fuller and more precise account of the Biblical view of human dominion."[106]

In Wybrow's study of Genesis 1, he notes first of all that the humans' dominion is not absolute; they have one limitation imposed on them: they may

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[104] Wybrow, 135.

[105] "In this Psalm the phrases 'the works of thy hands,' and 'all things,' suggest that everything in Creation is subjected to the power of man. Animate and inanimate, every natural object is under human sway. This portrait, like that drawn in Genesis 1, would seem to lend itself very easily to the quest for technological mastery over nature." Wybrow, 136.

[106] Wybrow, 136.

not eat the animals.[107] The mastery writers ignore this fact by jumping too quickly to Genesis 9, where permission to eat animals is given, or at least to Genesis 2, where the man names the animals, and which the mastery writers see as proof of human dominion over the animals. To do this sort of proof-texting, says Wybrow, is to ignore "the literary character of the Biblical story." Rather, one must read Genesis 1 to 9 as a "complete narrative." Genesis 1, 2-3, and 9 are different stories, but closely interrelated.[108]

The first chapter of Genesis portrays an ideal, with a high view of the goodness of creation, in which humans are divinely-appointed rulers over everything under the heavens. Goodness seems to be particularly associated with order. Humanity is not specifically said to be good, but in creation as it is described by Genesis 1, there is no evil, vegetarianism, no death,[109] no sin, and no inequality.[110]

Genesis 2 contains a second creation story which is not chronologically continuous from Genesis 1, but rather a parallel account of the beginning. In this chapter, humans are not so lofty and the world is not so bountiful. The man

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[107] Or more precisely, Genesis 1:29 directs the humans to eat the vegetation, which is not exactly the same as prohibiting them from eating the animals.

[108] Wybrow, 137.

[109] Many authors debate whether the first creation story precludes the possibility of death. For example, Primavesi, who will be studied in the next chapter, points out that the command to "be fruitful and multiply" suggests that death can occur in the original creation; otherwise the human population of earth would not be in constant need of replenishing. Anne Primavesi, From Apocalypse to Genesis: Ecology, Feminism and Christianity (Fortress Press: Minneapolis, 1991), 227.

[110] Wybrow, 138.

is said to possess the breath of life, but not the image of God. He is not given dominion, but rather a garden to till, or "in a less traditional but perhaps more accurate translation, to serve (*'ābad*) and to guard (*šāmar*)."[111] Fundamentally, the difference between the two creation stories is that, in Genesis 1 the earth is created to serve humanity, and in Genesis 2 humanity is created to serve the earth. Furthermore, in Genesis 1 the man rules the animals but not his equal, the woman, and in Genesis 3 the man rules the woman but not the animals, who were created to be his companions.

Unlike the earth of Genesis 1, Eden in Genesis 2 to 3 contains the possibility of death, should the humans eat from the tree of knowledge. Following the expulsion from Eden, death appears when Cain kills Abel, and continues with Lamech. Violence multiplies, instead of species. God decides to abort creation, and destroys most of the life on earth in the flood.

Wybrow's unique contribution to this study is his contention that the story of Noah is in fact a third account of creation. The flood returns the earth to the watery and chaotic state in which it began in Genesis 1: 1-2. Noah and his wife become the new Adam and Eve:

> When the Flood waters recede, Noah and his wife emerge upon the earth as its sole possessors, a second 'male and female,' as it were, recalling Genesis 1: 26-28, but they carry with them the history of human failing and suffering recounted in Genesis 3-8. Thus, Genesis 9 is, effectively, a third, and more accurate, account of human beginnings, uniting the

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[111] Wybrow, 139.

> theme of earth-possession from Genesis 1 to the themes of human failing and environmental harshness developed in Genesis 2-8.[112]

In the story of Noah and the flood, the two seemingly contradictory creation stories of Genesis 1 to 3 are united. The language used to bless Noah and his sons ("be fruitful and multiply") deliberately imitates the first, ideal creation story in Genesis 1. There are significant differences, though. The humans are not told to have dominion, nor is it said that they carry the image of God. And here, in Genesis 9, there is no repeating refrain, "And it was good."

This understanding of Genesis 9 is essential to the interpretation of humanity's permission to eat the animals. The mastery writers see this as simply a progression of the dominion over the earth given to humanity in Genesis 1. Wybrow, on the other hand, says that Genesis 9 is intended not as an addition to, but as a contrast to Genesis 1:

> Note first that man's "dominion" over the animals has been replaced by the "fear" and "dread" of the animals for man. This is not surprising, since the animals are about to become man's food, but the point is that the pronouncement in Genesis 9 is meant primarily *to show the contrast with the bequest of Genesis 1, not merely to add to it.* Human beings now have a wider range of food, but there is a terrible loss: fear and dread have entered Creation, and have become ingredients in man's dominion over the animals. A benign and bloodless rule has become, from the animals' point of view, a harsh tyranny.[113]

Permission for humanity to eat meat, then, according to Wybrow, should not be seen as a grand and joyous expression of dominion, but rather capitulation to a

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[112] Wybrow, 140.
[113] Wybrow, 141.

violent and fallen humanity, which no longer is given dominion, and lives in a world no longer called "good" (cf. 8:20 ff).

Genesis 2: 18-21, in which the man names the animals, is essential to the mastery writers' argument. They give no explanation, though, of what is so crucial about this passage. Wybrow hypothesizes that their reasoning may take one of two lines. The first is that this story parallels the practice of an ancient "Oriental potentate," by which naming is an act of sovereignty or command. If so, this is not an adequate parallel, says Wybrow, "since the Oriental king (if he is a proper king and not merely a cruel despot) will command the energies of his subjects but will not claim their lives (if they are law-abiding)." Therefore, Adam's naming of the animals would not give him permission to kill the animals as food.

The other possible line of argument the mastery writers may have in mind is "the 'primitive' and 'magical' belief that knowing the 'name' of something will give one power over that thing." If so, Wybrow says, this argument in fact contradicts the mastery hypothesis:

> For if the Bible is to be presented as a text which lays the groundwork for modern experimental science and modern technology, it can only be an embarrassment that, in one of its most technological-sounding moments, it teaches that human mastery comes from an obviously 'pagan' notion such as the magical power of names.[114]

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[114] Wybrow, 144-145.

The "obvious reading" of Genesis 2: 18-21, says Wybrow, when it is properly understood in its context, is "the difficulty of finding a companion fit for man." This is not "crucial" to the understanding of the Bible's view of humanity's relationship to nature, but "incidental."[115]

Next Wybrow examines the relationship between the phrases "image of God" and "dominion." In the mastery writers' view, possessing the image of God means to have dominion, which means mastery over nature. The word "image" appears in Genesis 5:3, when it is stated that Adam fathered a son "after his image." It also appears in Genesis 9 (for the last time in the Bible) as a restriction on human violence, "not to suggest human power over nature but to suggest human restraint regarding murder." The only other occurrences of "image" are in Genesis 1:26 and 27, in which Wybrow says, "the alleged connection [between image and dominion] is debatable." Therefore, he concludes, "we reach an impasse." It cannot be proven whether the image of God means domination over nature. Wybrow cannot contradict the mastery writers on this point but, because the evidence is so weak, the mastery writers cannot make a strong point of it either.[116]

Furthermore, Wybrow says, citing James Barr, historically the image of God has not been interpreted to mean mastery, but rather a moral, intellectual,

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[115] Wybrow, 143.
[116] Wybrow, 145.

and spiritual superiority of humanity over the rest of creation. Even if the Bible did intend that the image of God meant human mastery over nature, the mastery hypothesis is still invalidated:

> For no influential Western interpreter of Genesis realized this, or could have realized this, until after the rise of modern Biblical scholarship, and since modern Biblical scholarship did not take hold on the Western mind until at least a century after the Industrial Revolution, this interpretation of the 'image' of God could not have been greatly influential in turning the West towards mastery. At most, it could have served as a *post factum* justification of mastery.[117]

So even though the Biblical meaning of "image" is unclear, the history of interpretation demonstrates that "image of God" could not have been used as motivation for human mastery, as the mastery writers claim, but could only have been used afterwards as justification of human actions.[118]

The remainder of this section of Wybrow's book is dedicated to answering three questions: Since the Bible does give humanity dominion, 1) what kind of dominion is it? 2) over what is that dominion? and 3) what limits are put on that dominion? For the first question, Wybrow bows to Barr who, as it was stated earlier in this thesis, wrote that the words which describe human authority, subdue (*kabaš*) and dominion (*rādâ*) are not as harsh as the mastery writers suggest.[119] Human dominion, therefore, may be rigorous, but not unrestrained.

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[117] Wybrow, 146.

[118] And this is in fact was what was done during the Renaissance, according to Wybrow. Wybrow, 147.

[119] Adding to Barr's analysis, Wybrow says that *kabaš*, when used in other parts of the Bible, refers not to the land, but to the occupants of the land. Therefore, a suitable translation of *kabaš* would be "occupy," which is consonant with the command, "Be fruitful and multiply,

As to what in nature (or in the heavens, the earth, and the sea) [120] human dominion is over, this too is limited. Genesis 1 and Psalm 8 contain similar lists of the things over which humanity has dominion. It is clear from these passages that human dominion is not over nature as a whole, but only over part of creation, namely the living things – domestic animals, wild animals and creeping things, birds, and fish. Human beings are given permission to "take charge of and exploit the earth," but not until Genesis 3: 17-19, "when farming becomes a necessity, [and] the earth, along with the animals, is understood to be in some sense under human control."[121]

As Wybrow noted earlier, however, the whole of creation was seen as being composed of three parts: the earth, the heavens, and the sea. In all that has been said so far, humanity has only been given dominion over the earth; their dominion does not extend to the sea or the heavens. Psalms 115 and 104

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and fill the earth and subdue (*kabas*) it." Furthermore, the dominion of humanity parallels the rulership of a king, which the Bible says (in Deut. 17: 14-20, 1 Sam. 8: 1-18, and other places) "uses a minimum of force."

[120] Wybrow points out that there is no word in biblical Hebrew for "nature." In modern usage, "nature" has two meanings. One is "characteristic behaviour," or customs, which refers not to natural properties, but to ethical and social behaviour. The other is nature as "non-artificial objects." As for nature as characteristic behaviour, the Bible tells humans not to interfere with the natural behaviour of people and things, says Wybrow. For example, in Exodus 23:19, 34:26, and Deuteronomy 14:21, Mosaic Law forbids boiling a calf in its mother's milk. The simplest explanation for this law, says Wybrow, is that to boil a calf in its mother's milk would be to violate the nature, *i.e.* characteristic behaviour, of milk: "The mother's milk, *by nature*, is meant to be a source of life and nourishment for the infant mammal, not an accessory to its killing. It is harsh enough to a mother goat to take her kid away and kill it; it is positively perverse, contrary to nature, to expect the mother to supply her own milk to make the meal more delectable." Wybrow, 156. Humans, then, are not to have dominion over the natural behaviour of living beings, with one exception: they are to exercise control over their own evil ways. Wybrow, 150.

[121] Wybrow, 151.

make it particularly clear that the heavens are under God's authority alone. Part of the conflict in the story of Babel is over humanity trying to take control of heaven. Furthermore, Genesis 1 says that the sun and the moon are to rule over the day and night respectively, and therefore also rule partially over the creatures of the earth.[122] Humanity's dominion, then, is limited to the earth, excluded from the sea and the heavens, and even then is under the limitations of the rule of the day and night by the great lights of the heavens.

That human dominion is limited to the earth is particularly telling against the arguments of the mastery writers, Wybrow says. According to the mastery hypothesis, the Bible's understanding of nature is operative today. If this were so, says Wybrow, humanity would not be exploring space:

> In the ancient world, the restriction was of little moment, since the heavens were unattainable. But today, the question is real. If the heavens are God's home, or God's throne, or, less literally, are in some sense reserved for God, then the modern attempt to 'conquer space' would seem to be an attempt at usurpation.[123]

Though this may seem like a foolish argument, the mastery writers claim that the biblical worldview is operative in today's society, and so they need to be

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[122] "For, by controlling the day and night, they [sun and moon] control the tides, the activity of green plants, and the waking and sleeping habits of all animal races, including the human. Man and his kingdom [the earth] therefore exist under the powerful, not to say deterministic, influence of the sun and moon. His mastery, even in the lower world, is decisively circumscribed by the authority of a larger realm." Wybrow, 152.

[123] Wybrow, 152-153.

consistent in their analysis. Wybrow accuses them of "once again exercising their procedure of selective reading."[124]

Turning to the third question, of what limits are placed on human dominion, Wybrow points out that even humanity's dominion over the earth is limited. The Mosaic Laws contain numerous conservation laws, which might either be read as enlightened self-interest for human beings, but more likely, he thinks, as a protection of the rights of all living things.[125] Wybrow concludes that the land has rights:

> Man is never to assume that all of creation exists solely for him. It exists for itself as well. . . . The law thus sustains an attitude toward nature in which the land has its own proper dignity and man has his proper limitations.[126]

The Bible does not give unlimited human authority over the earth, then. The Mosaic Laws protect the rights of the land by limiting human dominion.

Humanity is further limited in its use of animals. This is perhaps implied, rather than obviously stated, in the biblical text: "The laws of Israel hardly contain a systematic declaration of animals rights, but a certain humane

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[124] Wybrow, 153.

[125] For example, the prohibition in Deuteronomy 20: 19-20 against cutting down fruit trees in a city being besieged is not only intended to ensure food for the new captives of the city, but to protect the rights of fruit trees. Trees that do not bear fruit may be used for construction; fruit trees are for producing fruit. Leviticus 25: 1-7 provides a sabbath rest for the land. Again, this may be interpreted as being for the benefit of the humans who eat the food produced by the land. But since the rest is sabbath rest, the same sort of rest that humans are to receive, this is best read as a religious law, not an agricultural one. Wybrow, 156.

[126] Wybrow, 156.

sentiment seems to be expressed in them."[127] Wybrow is confirmed in his hypothesis in the story of Jonah, where God takes pity not only on the human inhabitants of Nineveh, but on its cattle as well.

In this study, Wybrow concludes that the Bible does not grant unlimited human dominion over all of nature, as the mastery hypothesis states. Human dominion is to be firm but not cruel; only over the earth and its creatures; and even then tempered by justice and compassion. Wybrow's opponents' arguments are entirely invalidated: "According to a careful interpretation of the Biblical text, then, the mastery writers' account of 'dominion' must be judged to be as flawed as their account of 'desacralization.'"[128] The mastery hypothesis is defeated, as their two most important arguments have been proven inaccurate, and the entire hypothesis fails.

The third section of Wybrow's book is intended to provide an alternate analysis of the relationship between the Genesis creation stories and the environmental crisis to that provided by the mastery writers. Wybrow's alternate view of the relationship between the Bible and the environmental crisis can be summarized in a few sentences:

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[127] For example, according to Leviticus 11, humans may not eat all animals, namely the animals that are designated as "unclean." Deuteronomy 22 says that humans may take the young from a nest but they may not kill the mother, thus prohibiting the termination of the bird's family line. According to Deuteronomy 25, oxen used for plowing a field may not be muzzled, in order that the oxen may share in the fruits of their labour. The Mosaic Laws protect not only the land but the animals as well from human dominion. Wybrow, 158.

[128] Wybrow, 159.

> Though this result [of the biblical analysis] in itself seems to be enough to invalidate the mastery hypothesis, it would be unjust to the mastery writers not to press the inquiry a little further. For it appears that their connection of modern mastery with the Bible, though inadequate as a guide to the Biblical text, is quite valuable as an insight into the *history of interpretation* of the Biblical text, and thereby into the history of Western thoughts and attitudes. It turns out to be the case, more often than even the mastery writers indicated, that the modern idea of mastery was, from its inception, expressed in Biblical language. And it turns out that the correct conclusion to be drawn from this fact is, not that the Bible taught modern mastery, but that the language of the Bible was adopted in order to legitimate ideas of human dominion which were not themselves Biblical in origin or spirit.[129]

Wybrow's conclusion, then, is that the Bible itself does not contain the blueprints for modern mastery over nature, nor even the seeds that would later grow into such. Rather, the project of modern mastery was justified in biblical language, even though such a project is not merely absent from the Bible, but in fact the opposite of biblical teaching.

Wybrow's The Bible, Baconianism, and Mastery over Nature is a much-needed contribution to the Bible and ecology debate. He makes up for the previous brevity and lack of original scholarship in early writers. He is well-read in the "mastery writers," and is able to counter carefully their arguments.

Wybrow's book is not without its weaknesses, though. His biblical analysis could well fall under the same criticism he directs against his opponents. He writes:

> The mastery writers exhibit a somewhat unsystematic approach to interpreting the Old Testament. This is true of their Biblical commentary

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[129] Wybrow, 163.

> in general, and most obvious in their argument about 'dominion.' In claiming that the Bible preaches 'dominion,' they rest a great amount of weight upon a few striking passages – Genesis 1: 26-28, Genesis 2: 19-20, and Psalm 8: 5-8 – but pay little attention to the literary context of these passages. The literary context generally ignored includes not only the immediate context (i.e., the neighbouring verses), but also the broader context – those large units of the Bible (e.g., Genesis 1-11, and that entire body of Psalms which portray nature) in which the smaller units are located and have their meaning.[130]

In short, Wybrow criticizes the mastery writers for proof-texting, using only a small number of verses to justify their theories, and for paying far too little attention to the context of these verses. Yet, in his counter-argument, Wybrow may also be seen to be proof-texting. In the first chapter of his biblical analysis, in which he tackles the mastery writers' claim that the Bible desacralizes nature, he refers to parts of Psalms 96 and 148, Isaiah, Genesis, Leviticus, Exodus, Jonah, and even non-biblical Augustine. A study of Genesis 1-11 and the Psalms would seem appropriate for Wybrow's definition of the context of the verses used by the mastery writers, but at times the context widens to include "the greater whole, which is the Old Testament."[131] He gives no explanation of how such diverse books of the Bible as Jonah and the books of law can serve as a commentary on the Genesis creation stories, except that he claims they contain similar themes. He critiques the mastery writers for their "somewhat

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[130] Wybrow, 105-106.
[131] Wybrow, 136.

unsystematic approach," yet he defines his own study as "no particular school of interpretive method [except] . . . that of attentive reading of the text."[132]

In part, he is justified in this approach, because he says from the beginning that he wishes "to stay on the mastery writers' own ground."[133] Wybrow's approach to the biblical text directly parallels that taken by the mastery writers. The mastery writers point to a small number of verses to support their hypothesis. Wybrow points to a larger number of verses that would seem to contradict the mastery hypothesis. This in itself would be enough to prove that the mastery hypothesis is untenable.

Wybrow, however, takes his analysis a step further. Not only does he point to texts that contradict the mastery hypothesis, he claims that the verses cited by the mastery writers also do not support the mastery hypothesis. In the end, he presents us with a picture of the Hebrew Bible which is wholly consistent in its attitude towards humanity's role in nature. He writes:

> [It] therefore can be said that the Bible had a special influence upon the modern project of mastering nature – as long as it is not implied that the Biblical authors intended to promote that project or would have approved of it.[134]

According to Wybrow, the Bible is absolutely consistent in its attitude towards nature and humanity's role within it.

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[132] Wybrow, 106.
[133] Wybrow, 106.
[134] Wybrow, 34.

His insistence on the Bible's consistency in its attitude towards human mastery seems to be motivated, as it was for the biblical scholars studied above, by a desire not only to disprove the Bible's complicity in the ecological crisis, but also to make it part of the solution to the same problem. He says that, in the current age of environmental crisis, many people are turning to the major religions for solutions.[135] In Wybrow's analysis of the biblical texts, he wishes to discover the Bible's answer to this great contemporary question:

> The 'Judeo-Christian view of nature,' at least insofar as it is found in the Bible, proves to rival the 'pagan view,' both in its appreciation of the beauty and dignity of nature and in its suspicion of unlimited human claims over it.[136]

Despite his claims to be approaching this study with no "particular theological stance, either Christian or Jewish,"[137] he has a hidden agenda behind his analysis. He wants not only to set the record right on biblical interpretation, but also to defend the Judeo-Christian faith as a relevant and vibrant response to one of the great questions of this generation, the environmental crisis.

Finally, Wybrow's decision not to discuss any of the mastery writers in particular, but rather "a synthesis of the most convincing arguments of the various authors" is questionable. He admits to the great variety of authors he

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[135] "And, in the present state of the world, when the problems posed by our technological prowess loom so large, and when the relevance of the great religious traditions to this situation is so earnestly inquired after, it is important not to accept faulty analyses and misplaced criticism." Wybrow, 5.

[136] Wybrow, 103.

[137] Wybrow, 106.

categorizes by the phrase "mastery writers:"

> The authors have differing evaluations of the impact of science, technology, and the mastery of nature upon the modern world, and also differing religious loyalties, both within and without the Christian tradition. [They are] agnostic, Buddhist, Orthodox, Catholic, and Protestant writers, who come from French, Hungarian, Russian, American, British, and Canadian backgrounds, and whose fields of expertise include theology, philosophy, history, and sociology . . .[138]

One is forced to wonder whether it is over-simplistic to lump such a variety of authors into one group, just as Wybrow says the mastery writers are being over-simplistic for placing all religions that are not Judeo-Christian into the category of "pagan." Furthermore, when Wybrow distills the mastery hypothesis down into two main arguments – that the Bible desacralized nature, and the Bible gives humanity unlimited dominion – one is forced to wonder whether he is being fair to the authors against whom he is arguing, or simplifying the thesis so that it is easier to argue against.

Overall, Wybrow's work is so thorough in its study that it is difficult to critique. Its historical study is strong, and its biblical analysis is superior to anything produced by any of the writers in the Genesis and ecology debate to this point. It presents a much higher starting point from which future contributors will have to begin.

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[138] Wybrow, 33.

3.5 Ronald A. Simkins
Creator and Creation: Nature in the Worldview of Ancient Israel[139]

In the mid-1990s, the Genesis and ecology debate reaches a certain maturity in Ronald Simkins' work, Creator and Creation.[140] Simkins' book distinguishes itself immediately from the other contributions made by biblical scholars studied in this chapter in that it is not intended as an attack or counter-attack on Lynn White and his supporters. Simkins notes that the counter-attack has already been launched and reached its limits, and now it is time for a different approach:

> Rarely, however, did these [biblical] scholars abandon their historical orientation or formulate a systematic interpretation of the role of the environment in the religion and culture of ancient Israel. Their initial concern was merely to defend the Bible by correcting what they perceived to be misinterpretations of particular biblical passages.[141]

The counterattacks of the previous biblical scholars were limited, in that they tended to focus only on the small number of scriptural passages that were cited by White.[142] What is needed now, according to Simkins, is a thorough and "systematic interpretation," which he will endeavour to provide through his work.

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[139] Ronald A. Simkins, Creator and Creation: Nature in the Worldview of Ancient Israel (Peabody, Massachusetts: Hendrickson Publishers, Inc., 1994).

[140] Simkins holds a Ph.D. in Near Eastern Languages and Civilizations, specializing in history, religion, and literature of the Hebrew Bible. His doctoral dissertation, which studied the history of nature in the book of Joel, began to explore some of the themes which would surface in his 1994 book. Simkins' biographical information is taken from his web site at http://www.creighton.edu/~rsimkins/CV/EducCV.htm.

[141] Simkins, 2.

[142] Simkins, 7.

Simkins' contribution to the Genesis and ecology debate is also unique in that he does not villainize Lynn White, but in fact defends him in his biblical analysis.[143] He does not support White's thesis, but does say that it was an understandable interpretation considering the biblical scholarship of that time:

> If Lynn White misinterpreted the Bible's view of the relationship between humans and the natural world, as biblical scholars have held, he can be excused, for he simply echoed the dominant position of biblical scholarship at that time.[144]

The "dominant position of biblical scholarship" was largely to ignore the role that the natural world played in the Bible, to focus instead on God's activity in human history and on God's salvation. With such a focus among biblical scholars, Lynn White's conclusions were quite understandable: "How could a biblical interpretation that devalues nature, subordinating it to human concerns, contribute to the preservation of the environment?"[145]

Another significant contribution from Simkins' work is that he does not, like Wybrow's "mastery writers," try to draw a definite line between "pagan" and "biblical" religion. Rather, Simkins wishes to demonstrate the continuity between the myths and beliefs expressed in the Hebrew Bible, and those of other Ancient

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[143] Not only does Simkins not make White out to be the "bad guy," he in fact applauds White and his supporters for their significant contribution to the Genesis and ecology debate: Because of Lynn White's "Historic Roots," and "public awareness of the environmental crisis," biblical scholars were "forced" for the first time to consider seriously the Bible's view of nature. Simkins, 2. Simkins laments, however: "Interpreting the Bible's view of the natural world is still too often dominated by White's agenda." Simkins, 7.

[144] Simkins, 7.

[145] Simkins, 2.

Near Eastern writings.[146] Other ANE scholars have noted the similarities between the Bible and the writings of the Israelites' neighbours, but have put most of the emphasis on the differences:

> In fact, many scholars would acknowledge the resemblances . . . but few attribute any significance to these parallels. Rather, scholars have chosen to emphasize the uniqueness of the Bible's views of creation, focusing on how it differs from other ancient Near Eastern literature. Until recently, the predominant view of biblical scholars has been that the Israelites appropriated the alien creation myths and metaphors of their New Eastern neighbours, but in so doing, they transformed this material in a profound way.[147]

Simkins, on the other hand, says that the similarities between the Bible and other ANE writings must be noted, because people who lived in a similar geography and at a similar time would have shared a similar attitude towards the natural world.[148] Because the Israelites and their neighbours shared a similar experience of the world, the commonalities in their creation myths must not be ignored.

The fifth chapter of Creator and Creation is Simkins' detailed analysis of the Genesis creation stories. Simkins says that Israel's beliefs about nature are most explicit in their creation stories and their eschatological myths.[149] This is

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[146] "Creation in the Bible is described with metaphors and myths similar in kind to those used in the Mesopotamian, Egyptian, and Canaanite cultures." Simkins, 82.

[147] Simkins, 82.

[148] "This common creation model suggests that the Israelites shared a similar conception of reality, rooted in the basic experiences of the human body and the earth, as their ancient Near Eastern neighbors. Indeed, the Israelites were part of the larger ancient Near Eastern cultural milieu in that they shared similar understandings of the world with their neighbours. The differences between the Bible and other Near Eastern literature can only be understood from within the context of their similarities." Simkins, 89.

[149] Simkins, 173. He studies the eschatological myths in the sixth chapter of his book.

so, he says, because the significance of myths about the end and the beginning is focused on attitudes and beliefs at their time of writing, even though the stories are set in the distant future and past.[150] Myths take place in imaginary time, which is significantly different from normal human experience. They do not describe concrete human experience, but rather the social fabric, and therefore they also can expose a culture's values about the natural world.[151] Simkins' focus in his biblical study, he says, will be on "how they [creation myths] function *as myths*, that is, as vehicles for communicating the fundamental values of ancient Israelite society."[152]

Simkins begins his biblical study with the Yahwist creation myth in Genesis 2. He notes first that, contrary to the doctrine of creation *ex nihilo*, the biblical myths do not depict God creating from nothing. In the process of creation, God uses means and materials that are already available.[153] The earth exists before the beginning of the story; but two things are missing: rain, and a human worker. The purpose of God's creative activity is to provide these two things.

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[150] "In other words, these myths are about the present values and conditions of the people who generated them rather than the obscure past or the unknown future." Simkins, 173.

[151] For example, some originary or eschatological myths are used to explain current practices: "Traditional cultures turn to historical [imaginary] time in order to explain certain customs, such as Israel's redemption of the first born child from sacrifice (Gen. 22:1-18; Exod. 13: 11-16), or to justify social demands, such as that Israel should follow the laws of the covenant (cf. the numerous examples of God's past benevolence on behalf of Israel and the prophetic warnings of God's coming judgment when Israel transgresses the laws)." Simkins, 177.

[152] Simkins, 177.

[153] ". . . God creates either through establishing order and fixing boundaries, usually by separating a primordial substance, or through the natural physical processes of birth and growth. In the Yahwist creation myth the earth itself is primordial. God never creates the earth, but the earth without God's creative activity is barren and lifeless." Simkins, 178.

Forming the human from the earth is a type of birth, says Simkins:

> Scholars have frequently noted that God's creation of the human creature evokes the image of a potter . . . Yahweh's forming of the human creature from the dirt of the ground is a metaphor for humankind's birth out of the earth. The potter metaphor is simply an abstraction of the birth metaphor.[154]

This birth from the earth is a symbol of the connection between humanity and the earth – metaphor, not biology, Simkins says[155] – indicating that humans are bound to the earth.

Even though the stated purpose of creation at the beginning the story is to provide the dry earth with a human worker and rain, neither are provided in Genesis 2. The rain will not come until the flood, and God, not the human, plants the garden. The human is created, instead, to preserve the garden that had been planted by God. This is suggestive, for Simkins, that the human was not intended to remain forever in Eden:

> The fact that God, rather than the human creature, planted the garden suggests that the garden was not intended to be the dwelling place of humans. After all, the garden of Eden is the garden of *God.* Humans were created to till the ground and in this manner bring life to the sterile desert. This is their destiny, and the earth outside the garden will be their dwelling.[156]

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[154] Simkins, 179.
[155] Simkins, 180.
[156] Simkins, 180.

Since the human cannot fulfill the purpose it[157] was created for, tilling the ground, within Eden, then humanity's proper place lies beyond the garden. As children live with their parents until maturity, though, the human will remain in God's garden until it is ready to go out on its own.[158]

Recognizing that it is not good for the human to be alone, God attempts to create a companion, or as Simkins translates the Hebrew, "a helper corresponding to it."[159] God creates the animals and the birds and presents them all to the human, hoping it will name one of them "helper."[160] Like Wybrow, Simkins notes that much discussion has centred around the human's naming of the animals. His summary of the discussion and his conclusion are also similar to Wybrow's: "By naming the animals and birds the human creature distinguishes between those creatures that are suitable for a human helper and

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[157] Simkins will later argue that *'adam* was neither male nor female, or both, before the extraction of the rib. Therefore, the word "it" is used of the human before the creation of the woman.

[158] Here Simkins considers briefly the claims made by other scholars, such as Gowan, that the J creation story depicts the human in Eden with royal imagery, or as the king of Eden. The garden could represent a pleasure garden, characteristic of the royal gardens of the ancient Near East, where the king would practice his hobby – rather than actual work – of pruning and tending the plants. Along the same lines, the phrase "the Lord God formed the human creature from the dust of the ground" has been identified by Brueggemann as a "royal formula of enthronement," similar to that found 1 Kings 16:2. Simkins, though, says that neither of these interpretation fits the J narrative: "The human creature does not function as a king in his garden. Rather, the garden belongs to God who assigns the human creature a task in the garden and set limits on the creature's enjoyment of the garden. It is God who functions as the king in the Yahwist's myth." God is the king of Eden. The human is, at best, a young prince. Simkins, 181.

[159] Simkins, 182.

[160] The creation of the animals parallels the forming of the first human: "The Yahwist myth emphasizes that humans are similar to the animals and the birds in both substance and method of creation. All living beings, regardless of species, make up the genus of creature; none are divine." Simkins, 182.

those that are not."[161] The naming episode has nothing to do with human power over the rest of creation; it is simply part of the tale of finding the human a proper helper.

Because God cannot form a suitable helper from the ground, God tries a different approach: the creation of a woman from the first human's rib. Simkins argues that, until this moment, the first human was either asexual or androgynous:

> By splitting the human creature, God introduces differentiation into the human species . . . By uniting in marriage, the man and the woman restore the one flesh from which they originated.[162]

The differentiation that is introduced, though, says Simkins, is not sexual but social. The man and the woman are given the titles of husband and wife; the job descriptions for those roles come later. The statement that the two humans were naked but not ashamed indicates, to Simkins, a lack of sexual awareness:

> The implication of this statement is that the human couple is sexually unaware. In other words, they do not know that the union of their bodies has the potential to produce new life. They are like children unacquainted with the biological and cultural significance of their bodies, and so their nakedness means nothing to them.[163]

The man and the woman are still children in Eden.

The metaphor of children growing to maturity continues in Genesis 3. Simkins denies the traditional interpretation of Genesis 3, namely that the

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[161] Simkins, 183.
[162] Simkins, 183-184.
[163] Simkins, 184.

humans were expelled from Eden for disobedience, and that this event was the "Fall" of humanity. It is true that the humans disregard God's command not to eat from the tree of knowledge, but God never labels this act a "sin." He notes that the Jewish tradition calls this event the "expulsion," not the "Fall." Simkins interprets the Genesis 3 story as a right of passage:

> All humans must eventually mature into adults. To remain in childhood indefinitely is tantamount to denying one's own humanity, for only in adulthood do humans find their fulfillment. For this reason, the human couple does not stay content with the status quo world of the unreal garden of Eden. The man and the woman go through a rite of passage in the liminal setting of the garden of Eden . . . and are transformed into real humans living in a real world.[164]

Eating the tree of knowledge, then, does not cause the humans to "fall," but to ascend into the maturity of adulthood.

The serpent of the story is only a serpent, says Simkins. Later interpretation saw the serpent as a personification of evil or embodiment of Satan. According to the text, however, the serpent is just another one of the creatures that God formed from the ground. The serpent, he notes, is described as "crafty," which may in Hebrew have been meant as a contrast to the humans' condition:

> Specifically, the serpent is identified as the most "crafty" (a Hebrew pun on the word "naked") of all the creatures that God had made (3:1). In the ancient Near East, the serpent was a symbol of both immortality and wisdom . . . The serpent thus stands in contrast to the human couple, who are also "naked," but who are neither immortal nor wise.[165]

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[164] Simkins, 185.
[165] Simkins, 186.

Because Simkins believes that other ANE texts influenced the writing of the Bible, he is unafraid to bring in this information that is not included in the biblical text: the serpent is immortal and wise.

Because the serpent is wise, he knows God's true rationale in forbidding the tree of knowledge to the humans. He knows that the threat of death is an empty threat, because the humans are already mortal.[166] God's true reason for forbidding the fruit from the tree of knowledge is that, if the humans ate it, they would become like gods, knowing good and evil. The serpent then aids the humans in their process of maturity by challenging their childlike obedience to God. The humans are persuaded by the serpent's reasoning, and eat the fruit from the tree of knowledge.[167]

Simkins then argues that the knowledge of good and evil includes the knowledge of sexuality. Immediately after the couple eats the fruit, they become ashamed of their nakedness:

> The context suggests that the knowledge of good and evil must have something to do with the human couple's awareness of sexuality; before they eat the fruit the couple is sexually unaware (they are naked yet not ashamed), but after they eat the fruit they are aware of their sexual nature (they know they are naked and thus cover their genitals). The

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[166] Simkins notes that the story mentions two particular trees: the tree of life, and the tree of the knowledge of good and evil. He hypothesizes that the presence of the tree of life indicates that the human is mortal from its beginning, but the tree offers the possibility of immortality. The tree of knowledge is strictly off-limits; the human may eat from any other tree, including the tree of life. Simkins, 182.

[167] Simkins, 186.

> knowledge of good and evil, then, must entail the knowledge of sexuality.[168]

He further supports his argument by noting that the J author uses "knowledge" as a euphemism for sexual relations. Because the man and woman did not receive the knowledge of sexuality earlier, they could not have had sexual relations prior to their expulsion from Eden.

The knowledge of good and evil, though, is more than sexual knowledge. It is probably a "merism," Simkins says, for universal knowledge – all knowledge from A to Z. Furthermore, this is the knowledge that distinguishes humanity from the rest of creation. Therefore, Simkins calls it "cultural knowledge."[169] Culture, he says, is based on the ability to create. This is the way in which the humans have become "like God" – the ability to create new life. Before, only God could create new life.[170]

Awareness of sexuality brings about a division of labour: the woman will bear children; the man will till the ground and plant crops. Simkins says that these are not curses, as they have been traditionally interpreted, but only natural consequence of the humans' actions:

> On the one hand, the text suggests that God plays an active role in the enactment of these consequences. Specifically, it appears that God intensifies the consequences that the man and the woman must suffer. On the other hand, these consequences inevitably result from the human

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[168] Simkins, 186-187.

[169] "By acquiring knowledge, the man and woman gain the potential for culture; they are now able to distinguish themselves from the rest of creation." Simkins, 187.

[170] Simkins, 188.

> couple's actions . . . The consequences reflect the occasionally painful reality of adulthood.[171]

The humans are not cursed; they only have to live with the consequence of their newfound maturity.

On the other hand, the serpent is cursed. Simkins finds it odd that the serpent would be punished, as all he did was tell the truth to the humans. He writes this oddity off as an "etiology" – an explanation of why serpents in general must crawl through the dirt. Furthermore, the serpent acts as a symbol for all animals. The cultural knowledge that the humans have acquired creates a disruption in the harmony between humans and the rest of the animals of Genesis 2.[172]

The division of labour mentioned in Genesis 3 is not intended as a justification of male dominance. Rather, the statement about a man ruling a woman is related to child-bearing in ancient Israel:

> It is culturally specific. In ancient Israel the husband could demand his wife bear him children. The bearing of many children was essential in order to overcome the high mortality rate and still provide enough laborers to maintain subsistence. In order to ensure a large enough family despite the woman's possible reluctance to bear children – many women in the ancient world died in childbirth . . . – the man could demand sexual relations with his wife.[173]

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[171] Simkins, 188.
[172] Simkins, 189.
[173] Simkins, 190.

The statement that men rule women is a reflection of the cultural context in which the myth was written. Furthermore, Simkins notes, the rule of the man would not be oppressive, because the woman's desire will be for her husband.

Though the humans have distinguished themselves from the rest of creation through the acquisition of knowledge, they are nevertheless still creatures.[174] So that the humans do not attempt to become any more like God, that is immortal, they are denied access to the tree of life. Their garments of animal skins further distinguish them from both the animals and God:

> [The] garments also represent the differentiation between humans and God. God's message to the human couple is clear: This far, but no further! The man and the woman have become creators like God, but they are not, nor will they ever be, divine. Their garments symbolize their human status.[175]

The human process of maturity takes them beyond the animals, but never as far as God.

Genesis 3 is not the Fall of humanity, says Simkins, but Genesis 4 to 6 certainly is; acquisition of knowledge does not cause humanity's Fall, but the use of it "unleashes the evil inclination of humans so that their wickedness becomes abundant on the earth." God therefore regrets the world that has been created, and decides to destroy all living creatures in a great flood. For Simkins, as for Wybrow, the flood story is the end of the J creation myth, but for a different

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[174] "Their substance is the substance of creation. The human creature was formed from the dust of the ground, and humans will return to dust when they die." Simkins, 190.

[175] Simkins, 191.

reason. For Simkins, creation comes to an end in Genesis 6 because rain has finally come upon the earth:

> The creation myth begins by noting that the earth is barren because of two factors: God has not caused rain to fall on the earth, and there is no human to till the ground. . . . After the flood, however, the cursing of the ground comes to an end. God institutes a regular seasonal cycle . . . At last the ground is receptive to human cultivation.[176]

The process of creation is complete when the two reasons for creative activity stated in Genesis 2 are fulfilled: a human has been created, and matured, to till the ground, and finally the rain nourishes the land.

What, then, are the J author's implicit values towards nature? Simkins notes the ambiguity of human life as it is described in the J creation myth. On the one hand, humans are creatures of the earth – they were made from the earth and will return to the earth at their deaths. On the other hand, humans are like God, in that they possess knowledge and can create life – even though these come with hardships and drawbacks. On the one hand, humans can master creation; on the other hand, like the rest of creation, humans will die.[177]

Simkins now turns to a briefer study of the Priestly account of creation. This is different from the J myth both in form and in content. Whereas the world of Genesis 2 was dry, the earth in Genesis 1 is covered with water. On the other

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[176] Simkins, 192.
[177] Simkins, 192-193.

hand, the two accounts are similar in that, in both, creation is not out of nothing, except possibly light, which in P is created by divine command alone.[178]

In the P myth, creation takes place over a six-day period, followed by a day of rest, during which a repeated pattern occurs during each day: 1) "God said," and a command; 2) "and it was so," 3) the act of creation or fulfillment of the command, by God or, on the third day, by the earth; 4) a statement of approval; and 5) the temporal formula, "it was evening and it was morning." Just as each day is structured, the entire creation process is structured. In the first three days, the environments are created, and in the second set of three days the beings corresponding to the environments are created, if it is accepted that the environment that corresponds to the heavenly bodies is light.[179]

Furthermore, the seven days of creation in the P narrative deliberately parallel the seven days of the human work week, concluding with the Sabbath day of rest. According to Simkins, this parallel symbolizes humanity's role in the ongoing creation:

> This correlation between Sabbath and covenant suggests that humans symbolically participate in the creation of the world by following the stipulations of the covenant. Human action makes a difference in this world! When humans follow the covenant, the order of creation is maintained. The established boundaries remained fixed. If humans neglect or reject the covenant, however, the creation itself suffers.[180]

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[178] Simkins, 195.
[179] Simkins, 195-197.
[180] Simkins, 198.

Creation is a process that was not complete at the beginning, but is ongoing. Humans participate in the process of creation by maintaining the order that God established at the start. Failure to maintain order, that is, failure to follow the covenant, results in a disruption of divinely-ordained order.

The creation of humanity is the focus of the P creation myth. P brings together two different observations about human nature. First, humans are distinct from nature: "They are 'like God' in their status and function within the created order."[181] At the same time, humanity is like the rest of creation. Humanity is given the command to "be fruitful and multiply," just as are the birds and fish. The mention of seeds in the plants and trees is a way of expressing that they, too, should increase their numbers. All living things have this in common: they reproduce. This may be why the P author draws special attention to the fact that humans are created male and female:

> The sexuality of the birds, the fish, and the animals is assumed by the Priestly writer, but such an assumption cannot be made for humans because they are in the image of God. For the Priestly writer God had no form of sexuality, no sexual differentiation. The Priestly writer thus states explicitly that humans were created male and female.[182]

Humans are similar to nature because, like the animals, fish, and birds, they have sexual differentiation and are capable of reproducing. This makes them like nature, but unlike God.

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[181] Simkins, 199.
[182] Simkins, 200.

In what way, then, are humans created in the image of God? According to Simkins, the close juxtaposition of the command to have dominion and the description of humans as "in the image of God," probably means the two are related.[183] However, the P author is not specific about in what way humans image God. It may be that the right to have dominion is based on the fact that humans are in the image of God, and not vice versa.[184] In the P narrative, according to Simkins, "the image of God" functions similarly to the phrase "knowledge of good and evil" in J. Whatever either of these means, it refers to that aspect of humanity that distinguishes it from the rest of creation.

Simkins defines "dominion" as "the human ability to exercise its will over creation."[185] Like God, humans have some measure of control over creation. He notes that the words that qualify human dominion, *kabaš* and *rādâ*, come from the military sphere and contain violent overtones, but "such connotations are lacking in the Priestly writer's use of these terms."[186]

Human dominion is not absolute, but has limitations imposed upon it. Specifically, in exercising dominion, humanity must maintain the order of creation. It is only implied in Genesis 1, but made more explicit in later P writings. For example, Simkins says, homosexuality is prohibited by the P author

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[183] Contrast Barr who, as stated earlier, denies a direct connection between "image" and "dominion."

[184] Simkins, 201.

[185] Simkins, 201.

[186] Simkins, 201.

because it disrupts the natural order:

> According to the order of creation, humans were created male and female. Thus, homosexual relations or sexual relations between humans and animals are strictly forbidden.[187]

Similarly, animals that the P narratives declares unclean are those that appear to violate the natural order, "*e.g.* the catfish which swims in the water but is covered with a skin rather than scales that are appropriate to fish."[188]

Human dominion may either maintain the established order or disintegrate it. The disruption of the natural order can normally be righted by ritual purification, as in the case of coming into contact with a corpse. Some violations, however, cannot be cleansed:

> But some violations of the created order – murder, sexual abominations, idolatry – defile a person permanently. Progressive violations even pollute the earth itself. Such pollution cannot be *ritually* cleansed; the creation itself must be purged.[189]

Disorder in the natural world causes disorder in all of creation. Where J says the flood was the result of rain, P says that it came as the result of the breakdown of the boundaries of creation: "The boundaries that separate the waters from the sky and the land break open so that the world returns to its primordial, undifferentiated, watery state."[190]

Like Wybrow before him, Simkins notes that the language used to

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[187] Simkins, 202.
[188] Simkins, 202.
[189] Simkins, 202.
[190] Simkins, 203.

describe the end of the flood indicates the beginning of a new creation. Unlike Wybrow, though, Simkins says that Noah and his family must continue the work that Adam and Eve began:

> After the flood, Noah and his family are given the mandate: "Be fruitful and multiply, and fill the earth" (9:1). Like the first humans, Noah and his family must act to sustain the creation. Unlike the first humans, however, no mandate is given for Noah to exercise dominion on the earth. Human dominion is assumed . . .[191]

After the flood, God puts two further limits on human dominion: the humans may eat the animals, on the condition that they drain the blood from them; and human blood is not to be shed. These regulations are put in place, says Simkins, "so that the creation will not again be destroyed by human pollution."[192]

In summary, the P creation myth says that human dominion on the earth is limited by the order of creation. The P creation story indicates the same implicit values as were found in J: humans are part of creation, but they also have a certain autonomy within creation.

The epilogue to Simkins' book explores the relevance of the Bible to the ecological crisis. Deliberately contradicting Lynn White, he says that the problem we face is not in the Bible itself, but in dominant scholarly interpretation. A new approach to the Bible, one which takes into account the role of the natural world, is needed. The ecological crisis is a human problem, he says. Humans caused it,

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[191] Simkins, 204.
[192] Simkins, 204.

therefore humans must cure it. The religions of the world have responded to the ecological crisis, asking their members to live with more responsibility towards the natural world. Seldom, though, is the Bible enlisted for the cause, because of distrust of the Bible's view of nature, based on dominant interpretive trends.[193]

What does Simkins' biblical analysis provide us with that can shed light on environmental questions? Humans and nature are both part of creation and dependant on God. Yet, within creation, humanity has a special role to play. The goal and challenge for humankind is to balance the development of culture with care and preservation of nature:

> We need not passively accept all that nature hands us – disease, pestilence, drought, flood, and other aspects of nature that threaten human life. We have the power to shape the natural world so that it is more suitable to human habitation. . . . We must turn to the sciences and other disciplines to establish the limits of each, but the biblical worldview emphasizes that both are essential aspects of any environmental agenda.[194]

Furthermore, the biblical insight that human action can affect nature must be foremost on our minds.

Finally, Simkins believes his study opens the door for a theological study of sin and the environment. If we know that humanity is hurt when nature is damaged, is not the destruction of the natural world a sin against God?

> The current environmental crisis is typically presented in either an anthropocentric (the concern for the future of human life) or biocentric (the concern for all types of life) perspective. Such a discussion could

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[193] Simkins, 256-259.
[194] Simkins, 261.

> place the current crisis in a theocentric (the concern for God) perspective and symbolically ascribe moral significance to our actions in relation to the environment.[195]

A better understanding of the Bible's views on nature can help people of faith to define their relationships to the natural world.

Simkins' contribution to the Bible and ecology debate has many strengths, including his comparison of the biblical creation stories to other Ancient Near Eastern texts, as mentioned earlier. Another strength is his focus on the biblical stories during his analysis. Unlike previous biblical scholars, he concentrates on the creation stories without reference to other seemingly unrelated parts of the Hebrew Bible or New Testament. Furthermore, he studies the Yahwistic and Priestly texts separately and, when he strays from Genesis 1 to 3, he refers only to other J and P writings exclusively. The only exception occurs when he explains humanity's role in creation in the P narrative by referring to Sabbath laws in other books without explaining the relationship of those books to the creation story.

Another strength of Simkins' work is that he does not expect absolute consistency in the Bible on its view of humanity's role within nature. He notes that there are three possible orientations that any one person may have towards humanity's relationship to nature. The first is "subjugation to nature," by which humans "have no control over nature and are subject to the inevitable effects of

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[195] Simkins, 264.

nature." The second is "harmony with nature," by which humans "are united with nature in a precarious balance so that their actions affect nature and themselves in turn." The third is "mastery over nature," by which nature "is made up of impersonal objects and forces that humans can / should manipulate for their own purposes."[196] Simkins expects to find all three of these orientations present in the biblical creation stories, as they are in all cultures, though one will at times take precedence over the others. For example, in his study he says that the P narrative contains elements of the "mastery-over-nature" solution, but it is subordinate to the "harmony with nature" solution.[197]

Simkins' study is also rife with weaknesses. In the chapter in which he studies the biblical creation texts, he is inconsistent in using just what the text says as a basis for his interpretation. For example, in studying the J creation myth, he says that to interpret the character of the serpent as the devil is to contradict what the text plainly says: "The serpent is only one of the creatures that God formed out of the ground."[198] On the other hand, Simkins insists that "the serpent tells the truth" to the man and woman about the tree of knowledge – that it will not bring death, but rather it will make them like God and give them knowledge of good and evil. The text itself does not say this in Genesis 3:7.

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[196] Simkins, 33.

[197] Even though White and others have interpreted it as primarily espousing the first. Simkins, 205.

[198] Simkins, 185-186.

The humans received knowledge, not about good and evil, but about nakedness.[199]

Furthermore, Simkins interprets knowledge of nakedness (and their previous lack of shame) as knowledge of sexuality (and their previous lack of knowledge of sexuality). The text of the story does not explicitly say that knowledge of nakedness means knowledge of sexuality. Simkins compensates for this by saying that knowledge of sexuality was one of the pieces of knowledge gained from eating the fruit of the tree. It is a plausible interpretation, but it is an interpretation – not "just what the text says." Overall in this part of his study Simkins creates the impression of a circular argument: the serpent was right, therefore the human couple did gain knowledge of good and evil from eating the fruit; since the humans gained knowledge of good and evil, the serpent had been right.

Simkins' consideration of the meaning of "dominion" in the P narrative, and its relationship to "the image of God," is severely lacking, considering earlier scholarship. For example, having studied the use of the word "image" in Genesis, Wybrow says, "the alleged connection [between image and dominion] is debatable," and concludes that it cannot be proven whether the image of God

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[199] Simkins gets around this difficulty by equating knowledge of nakedness with knowledge of sexuality, and knowledge of sexuality with knowledge of good and evil. Furthermore, later in the text of Genesis 3 God's statement that "the man has become like one of us, knowing good and evil" (Genesis 3:22) does support Simkins' assertion. For a good commentary on this subject, see Eugene Combs and Kenneth Post, The Foundations of Political

means domination over nature.[200] Barr argues that humanity's likeness to God lies not in its actions but in its being; humanity, in some way, is simply like God.[201] Simkins, on the other hand, simply assumes the connection between image and dominion: "[By] connecting the 'image of God' with dominion, the Priestly writer emphasized the human ability to exercise its will over creation."[202] Simkins' brevity on this points indicates a lack of knowledge of previous studies done on the topic.

Many of the weaknesses in Simkins' work may be attributed to a bias – namely, a Roman Catholic bias.[203] Statements such as "God's blessing is symbolized by human procreation,"[204] "fulfillment in the institution of marriage"[205] (even though the first human couple is never specifically said to be married), "the woman recognizes her social role as concerned primarily with childbearing,"[206] as well as his condemnation of homosexuality as contrary to the

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Order in *Genesis* and the *Chandogyā Upaniṣad* (Queenston, Ontario: The Edwin Mellen Press, 1987), 162-163.

[200] Wybrow, 145.

[201] Barr, 20.

[202] Simkins, 201.

[203] One begins to suspect his bias in reading the "Acknowledgements" to his book. He has been influenced by a number of people for whom "S.J." appears after their names, and he says that "the 'Old Testament and Ecology' task force of the Catholic Bible Association have served as a congenial forum for airing my ideas . . ." Simkins, xi. A glance at Simkins' *curriculum vitae* confirms that he teaches at a Jesuit university in Omaha, Nebraska. Information on Creighton University is taken from the internet web site http://www.creighton.edu.

[204] Simkins, 155.

[205] Simkins, 184.

[206] Simkins, 189.

natural order established by God,[207] though disguised as being derived from the biblical text, reveal orthodox, conservative Roman Catholic teaching.[208]

Finally, Simkins' study begs the question of relevance. In his concluding epilogue he is able to make some vague generalities about the relevance of a study such as his to the ecological crisis the world is now facing, but the details of his study leave one wondering what insight it can provide into the current situation. For example, how does the J myth's depiction of human division of labour apply to the modern situation? What is to be done with a world view that says a man "rules" his wife sexually and that a woman's primary duty is childbearing, in a context of women's liberation and equal rights?

Or more to the point of the environmental question, after the flood in the J mythology, God imposes two rules on humanity: that they can eat animals but only if the blood is drained, and human blood is not to be shed. Simkins says, "So that the creation will not again be destroyed by human pollution, God regulates human dominion."[209] He makes no mention of the fact that, obviously, the regulations did not work. The Bible makes no claims that human violence

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[207] Simkins, 202.

[208] See Joseph Cardinal Ratzinger and Interdicasterial Commission, Catechism of the Catholic Church (New York: Doubleday, 1995); on procreation as the purpose of sexuality, paragraphs 2332, 2363, 2366-2379, *et al.*; on the importance of marriage, 2333, 2335, 2337, 2360, 2364 *et al.*; and on the unnaturalness of homosexuality, 2357 and 2359. Simkins' study is a reflection of Roman Catholic doctrine, though its does at times vary slightly, such as his location of the "Fall" in Genesis 4 to 6 instead of in Genesis 3. The fact that he needs to locate a "Fall" in the Genesis creation stories at all indicates his Roman Catholic influence.

[209] Simkins, 204.

and pollution came to an end with the flood. How is a modern reader supposed to understand the importance of these regulations in a world that is so obviously polluted? Simkins himself describes our current situation:

> No longer can God proclaim that the creation is good, for humans have polluted the heavens and the earth. We have poisoned the ground with hazardous chemicals ranging from the toxic wastes that leech out of our landfills to the pesticides and fertilizers we use in an attempt to make the earth produce more than it is capable of sustaining. We have contaminated the oceans and waterways . . .[210]

And so he goes for another half a page. God's regulations have not worked; the earth has become more polluted than it ever was before. Simkins' work may be a good study of the Bible, but it comes short on its possibility for application.

3.6 Summary

The biblical scholars' contribution to the Bible and ecology debate came in two waves – the first in the early to mid 1970s, the second in the 1990s. The first wave, represented here by Gowan, Schumaker, and Barr, was intended primarily as a defense against Lynn White and his rapidly growing list of supporters.

This "counter-attack," as Gowan called it, challenged two of the basic premises of White's thesis. The first premise was that there was a historical connection between the Genesis creation stories and the modern practices of

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[210] Simkins, 258.

technological mastery over nature that led to the environmental crisis. Gowan counters this argument by demonstrating that even cultures that did not hold the Hebrew Bible as authoritative also attempted to control nature through technology and experienced negative consequences as a result. Barr's study concentrates more on biblical analysis, but casts some doubt on the historical connection by pointing out that traditional interpretations of Genesis did not associate humanity's image of God with technological ability.

The second of White's premises that biblical scholars attacked was his interpretation of the biblical texts. The contributors of the first wave concentrate their study mainly on the verses cited by White himself, Genesis 1: 26-28, though they expand the analysis to both Genesis creation stories and to other parts of the Hebrew Bible. In the 1980s reprint of Gowan's article, accompanied by Schumaker's critique, both authors include references to the New Testament in their study as well.

The conclusions of all of the authors in the first wave are unanimous: Lynn White's article is severely lacking in its biblical analysis, and the historical connection he outlines is questionable at least. Not only is the Bible not directly or indirectly responsible for the environmental crisis, they argue, but in fact the Bible contains a view of nature that can actually help mend current environmental problems. Gowan and Barr agree that the Genesis creation stories' anthropocentrism is the key to turning around the environmental mess.

What is needed is more technology, used responsibly, with strict limits, and for the benefit of all humankind.

During the second wave of the biblical scholars' contributions to the Genesis and ecology debate, the focus shifts from the negative to the positive. Though the 1990s authors still spend much time and effort on contradicting the White thesis, they are concerned also with providing an alternative view of the Bible's values towards nature.

Unlike the earlier authors, Wybrow does not try to deny any connection between the Genesis creation stories and the environmental crisis. He asserts, however, that the connection is an indirect one. The Bible itself did not intend the modern plan of mastery over nature as we know it. During the Renaissance, however, when the seeds of industrialism were sown, the concept of mastery was formulated in biblical language.

Simkins' work is the first not specifically intended as a defense against White. Though he does mention White and the influence of his thesis, he says that to concentrate exclusively on tearing down what was written before would be to limit his analysis of the Bible's views towards nature. Rather than taking a defensive stance, Simkins sets out to create a thorough and comprehensive study of the Bible's views on nature by comparison of the Bible to other ANE texts and a thorough study of the Genesis creation stories themselves.

Interestingly, the defensive element never disappears from the biblical scholars' contributions to the Genesis and ecology debate. Though Wybrow is not attacking Lynn White specifically, he is arguing against a collective body of authors whom he calls "the mastery writers," among whom White has been particularly influential. Though Simkins' study is not intended to be a defense against anyone, in his introductory chapter he dedicates a whole subsection to Lynn White and his legacy.

This may help to explain the almost 20 year gap in the biblical scholars' contribution to this debate. In the 1970s, they responded quickly in order to contradict the statements made about the Bible in White's 1967 article. They thought that they had launched a successful campaign, then lapsed into a comfortable silence. In the 1990s, however, it became apparent that White's article had become much more popular than the biblical scholars' counter-attack. For example, Simkins, writing in 1994, notes that even Christian theologians have taken White's remarks for granted:

> Some Christian theologians have even taken up the charge that the biblical view of nature is responsible for the current crisis and have provided further theological rationales to justify the charge.[211]

In the nineties, the White thesis became so popular that it was not just being restated by opponents of Christianity, but by Christian theologians themselves!

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[211] Simkins, 5.

It therefore became necessary for the biblical scholars to enter into the debate once again, but this time in a more thoroughgoing way.

An interesting finding of this study has been that the defense launched by the biblical scholars was not just a defense of the Bible, but also of the religions which hold the Bible as authoritative, mainly Christianity. White's attack was not just against Genesis, but against the Christian faith as well, and so the counter-attack also had a subtle undercurrent of Christian apologetics. In this way, the biblical scholars have the same agenda as the non-Religious Studies authors: to use a discussion of the Genesis creation stories as a forum for defending (or, in the case of White and Black, denouncing) the Christian faith.

This defense of Christianity comes across most noticeably in the authors' insistence on the Bible's relevance to the environmental crisis. White, too, argued that it was relevant, but in a negative way. The biblical scholars unanimously state not only that the Bible is not the cause of the environmental crisis, but also that it can provide a solution to the problem. Gowan concludes his article with the words: "For the Bible's teaching about the relationship of man and nature to God can teach us how to keep man not only alive, but fully and humanly alive."[212] Barr draws similar conclusions. He says not just the Bible, but

> [the] Jewish-Christian doctrine of creation is therefore much less responsible for the ecological crisis that is suggested by arguments such as those of Lynn White. On the contrary, the biblical foundations of that

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[212] Gowan, 1191.

> doctrine would tend in the opposite direction, away from a license to exploit and towards a duty to respect and protect.[213]

Wybrow, too, defends the Judeo-Christian faith, as well as the Bible, and Simkins' study of Genesis is used to justify Roman Catholic doctrine, as mentioned above. Underlying the biblical scholars' analyses is the assumption that the Bible, and the religions that call the Bible an authoritative text, are very relevant in a positive way to modern-day environmental concerns.

After the biblical scholars entered into the Genesis and ecology debate, the theologians soon entered the discussion. Though they were slower in responding to the attack launched by Lynn White, the theologians carried the debate during the biblical scholars' silent period of the 1980s, and continue to be a strong voice to the present day. The theologians will be the topic of discussion in the following chapter.

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[213] Barr, 30.

Chapter 4
The Theologians

4.1 Introduction

The Canadian Oxford Dictionary defines "apologetics" as:

1. a reasoned defense, esp. of Christianity
2. a branch of theology concerned with this.[1]

The Anchor Bible Dictionary notes that much of the New Testament literature, "written to promote and defend the Christian movement," can be read as apologetics, though the "study of early Christian apologetics typically begins with the writings of the Greek apologists of the 2d century."[2]

As indicated in chapter two, the Genesis and ecology debate began in 1967 when historian Lynn White, searching for the origins of the ecological crisis, almost accidentally stumbled upon the Genesis creation stories and laid the blame on the attitudes contained in those texts. His thesis was, at first, almost completely ignored in the world of Religious Studies. Scholars whose area of expertise lay outside of what would normally be considered Religious Studies, however, were quick to pick up on and promote White's ideas.

As noted in chapter three, biblical scholars soon entered the debate. They accused the non-specialists of possessing inadequate knowledge and background

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[1] "Apologetic," The Canadian Oxford Dictionary, 1998 ed.
[2] Arthur J. Drodge, "Apologetics, NT," The Anchor Bible Dictionary, 1992 ed.

to carry out a serious work of exegesis. They reinterpreted Genesis 1 to 3, setting it free from the "burden of guilt" that White had imposed upon it.

Underlying this debate, though never stated explicitly, was the belief that, as the Genesis creation stories were being defended, so was the Christian faith. Some scholars denied Christianity's responsibility for the ecological crisis altogether, and pointed to their interpretation of Genesis 1 to 3 as proof. Others reluctantly agreed that the Christian Church has at least been involved in the destruction of the natural world, or perhaps they have failed to put a stop to the destruction through their silence on ecological issues. Still, these scholars believed that a thorough and honest study of the genuine meaning of the Genesis creation stories was all that was needed to make Christianity a potential force for change.

After the biblical scholars had had their day, the debate was taken up by the theologians. What had remained secret before was now unveiled. No longer were the participants in the Genesis and ecology debate even attempting to disguise that their real concern was not just with the interpretation of ancient texts. What they were talking about was the Christian faith and its relevance to the context of a world in ecological crisis, defending the faith against the increasingly taken-for-granted thesis of Lynn White and his supporters. This chapter will discuss the way in which theologians and their unabashed apologetic agenda enter into the Genesis and ecology debate.

4.2 H. Paul Santmire

Brother Earth: nature, God and ecology in time of crisis[3]

The Travail of Nature: The Ambiguous Ecological Promise of Christian Theology[4]

The first theologian to enter into the Genesis and ecology debate is H. Paul Santmire in his 1970 book, Brother Earth. At the time his second book, The Travail of Nature, was published, he was serving as pastor of Grace Lutheran Church in Hartford, Connecticut. One of his reviewers calls him an "educator-pastor."[5]

Santmire begins by citing Lynn White's hypothesis, with a certain degree of sympathy:

> I am in full accord with the sentiments of historian Lynn White . . . "Since the roots of our trouble are so largely religious," White concludes, "the remedy must also be essentially religious, whether we call it that or not." Today as never before we need an "ecological theology," a theology that takes serious the life of man in nature and the life of nature itself.[6]

Having accepted White's statement that the ecological crisis is primarily a religious problem, Santmire sets out to provide resources for a religious solution. As such, he addresses his work to the "American Christian community," believing

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[3] H. Paul Santmire, Brother Earth: nature, God and ecology in time of crisis (New York: Thomas Nelson Inc., 1970).

[4] H. Paul Santmire, The Travail of Nature: The Ambiguous Promise of Christian Theology (Philadelphia: Fortress Press, 1985).

[5] Jerry K. Robbins, review of The Travail of Nature: The Ambiguous Promise of Christian Theology, by H. Paul Santmire, Theology Today 42 (January 1986): 537.

[6] Santmire, Brother Earth, 6.

this to be a "powerful force for ecological sanity," even though much within this community must first be "corrected and reformed."[7]

Santmire's book is intended to be a first attempt at the ecological theology he says is needed. He sets out in this task using no particular method. He says:

> Important as the proper theological method is . . . the proof of the method is in the doing, in the results. There is no single safe and reliable theological point of departure. Theology, like faith itself, is a venture, a risk.[8]

The only assumption on which his book is based is that both the Old and the New Testaments are equally authoritative; or, in his words: "we take our stand with the classical tradition of the Church and approach the *whole* Bible as Scripture."[9] Even though most of the details for an ecological theology are to be found in the Hebrew Bible, Santmire says, the New Testament is consistent and continuous in its attitude towards nature with the first Testament: "many details concerning nature found in the Old Testament are taken for granted in the New, particularly in the teachings of Jesus."[10]

Ecological theology is a very new area of study in 1970, Santmire admits, but not because the Bible does not lend itself to such a study. Rather, the majority of theologians and biblical scholars of the past have missed the ecological theme in the Bible by putting too much emphasis on other matters:

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[7] Santmire, Brother Earth, 6-7.
[8] Santmire, Brother Earth, 8.
[9] Santmire, Brother Earth, 82.
[10] Santmire, Brother Earth, 82.

> We should be aware, however, that the biblical picture of nature has not only been neglected in scholarly study, but frequently *obscured*, especially by certain prominent theologians. The problem has been an overly narrow focus.[11]

Santmire points to Karl Barth as an example of such a theologian, and Barth's insistence that the Bible is concerned primarily with "God's activity in relation to *man*." Emil Brunner, similarly, states that nature is only a backdrop to the history of humanity contained in the Bible.[12]

Santmire, on the other hand, intends to demonstrate that, though the Bible is interested in humanity's history, there is another theme running throughout the Testaments as well:

> The God witnessed to in the Bible plays out a *history with nature*, as well as a history with man. Together these two histories, inseparable yet distinct, comprise the Universal Divine Story of creation, redemption, and consummation.[13]

The story contained in the Bible is a history of both humanity and the natural world. Theologians of the past, having put almost exclusive emphasis on the first history, have neglected and obscured the second. It is this second history, the history of God's relationship with nature, which Santmire intends to rediscover.

Central to Santmire's argument is the statement that creation is not an isolated event, but only a beginning, leading to an ending or consummation:

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[11] Santmire, Brother Earth, 81.
[12] Santmire, Brother Earth, 81.
[13] Santmire, Brother Earth, 81.

> The alpha has meaning, in other words, only insofar as it is directed toward the omega. Creation is not just "back there;" creation is this present world as it is determined by, and moving toward, the Final Future of God.[14]

The final goal of creation, which Santmire calls "redemption," is the primary theme of the entire Bible. Even so, creation is not taken lightly, especially in the Old Testament's affirmation of "the integrity and goodness of the created order."[15]

The human creature is undoubtedly the primary focus of the two creation stories, Santmire says. This is especially obvious in the second narrative, but also true of the first: "man is the apex; creation is incomplete without him."[16] Even so, the beginning of a second theme begins to appear in Genesis 1 – the theme that Santmire has been calling "God's history with nature." Nature, in Genesis 1, is created for humanity's comfort and blessing, but also for the sake of God's own enjoyment. The repeated refrain, "and God saw that it was good," gives the narrative a note of divine satisfaction. Even though the final refrain, "It was very good" is only spoken after the creation of humanity, Santmire notes, this statement of goodness is not intended only for humanity:

> The "very good" of Genesis 1:31 refers to the whole: "and God saw *everything* that he had made and behold it was very good." Of course the creation would not be "very good," according to the Priestly writing, without man. But – and this is the point – neither would it be "very good"

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[14] Santmire, Brother Earth, 82.
[15] Santmire, Brother Earth, 82.
[16] Santmire, Brother Earth, 83.

> without the whole of nature. When God looks at all the results of his creative activity he takes joy in everything he sees.[17]

Nature is good, then, not only for its usefulness to humanity, but because nature itself is pleasing to God.[18]

In all of this discussion of the Bible's attitude towards nature, Santmire makes only the briefest study of the two words that would be the subject of so much argument throughout the rest of the Genesis and ecology debate: image and dominion. He says that humanity's dominion over nature must include a respect for nature. This respect is expressed in the biblical limits put on human dominion:

> Man's dominion is not unlimited: "a righteous man has regard for the life of his beast" (Ps. 12:10). Israel is commanded not to crossbreed cattle (Lev. 19:19; Dt. 22: 9-11) and not to destroy the young in a wild bird's nest (Dt. 22:6f.). Similarly, the land should lie fallow on the seventh year so the poor *and* the wild beasts can eat (Ex. 23:10f.); an ox is not to be muzzled when it treads grain (Dt. 25:4). Man also has the positive responsibility to till the earth and keep it (cf. Gen. 2:5).[19]

The biblical laws indicate that human dominion is limited, and these limits are intended for the well-being of the animals and the land, with no obvious benefit, in some cases, to humanity.

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[17] Santmire, Brother Earth, 83.

[18] Santmire finds similar expression of the joy nature brings God in Psalm 29, a celebration of God's works; in God's covenant with the whole of creation through Noah, when even the unclean animals (which are useless to humanity) are saved from the flood; and in several Psalms, where all of nature praises God and God is pleased. Santmire, Brother Earth, 84-87.

[19] Santmire, Brother Earth, 86.

Santmire's definition of "the image of God" is presented, with little explanation, as "reflected Divine glory:"

> God is pictured as crowning *man* with glory and honour (Ps. 8:5b; Ex. 34:29); behind this conviction, perhaps, is the idea that man's creation according to the image of God constitutes a reflection of the Divine glory.[20]

If the "image of God" is "reflected Divine glory," nature is not excluded from God's image: "Indeed, God fills the whole earth (Is. 6: 1-3) and also the heavens (Ps. 19:1) with his glory."[21] Humanity and nature, being filled with God's glory, both bear the image of God.

Santmire then turns mainly to the New Testament to complete the thought he began earlier: creation is the first act leading to the final act of judgement and redemption. The concept has its roots, for Santmire, in the Hebrew Bible, as in Isaiah: "For behold, I create a new heaven and a new earth."[22] The idea that the final judgement will include a new creation, or a renewal of creation, is continued in the New Testament, especially in the writings of Paul. Therefore, Santmire concludes, nature is destined to participate in redemption along with humankind:

> But the biblical writers do not see nature slipping away into nothingness at the Final Day. Rather they affirm that it is to be renewed and transformed. God has a special plan for nature as well as for man; he has a history with nature as well as with man.[23]

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[20] Santmire, Brother Earth, 87.
[21] Santmire, Brother Earth, 87.
[22] Isaiah 65:17a, quoted in Santmire, Brother Earth, 90.
[23] Santmire, Brother Earth, 92.

Nature, as well as humanity, is intended for salvation at the final judgement; therefore nature "has its own value in God's eyes," and is not merely a backdrop for human salvation.[24]

Nature is stable and orderly only because of God's constant presence within nature. In the biblical mindset, there are no "laws of nature" as we know them:

> God, in the perspective of the Old Testament, is thus the present source and ground of all the processes of nature. Nature is not a self-enclosed, self-sufficient reality, but totally dependent from moment to moment on God's power and presence.[25]

If there are no laws of nature, then God cannot be said to supersede natural law: "the whole of nature is an immense constellation of Divine interventions."[26] All movements of nature – whether they be orderly and stable, or out of the ordinary "miracles" – are the direct results of God's constant "purposeful act."[27]

Santmire concludes his work by asking, "What is the ethical pay-off of this theology?" He believes that an ecological theology provides a check against two "idolatries" of the previous decades. On the one hand, thinkers of the past have created what he calls an idolatry of Baal, the adoration of nature, characterized by "the cult of the simple life." Such an idolatry fails to live up to the challenges

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[24] Santmire, Brother Earth, 92.
[25] Santmire, Brother Earth, 93.
[26] Santmire, Brother Earth, 94.
[27] Santmire, Brother Earth, 96.

with which modern society presents humankind.[28] At the opposite extreme from the Baal idolatry is the idolatry of Mammon, characterized by exploitation of the natural world and "the cult of compulsive manipulation." This idolatry ignores the rights and goodness of the natural world.[29] These two extreme points of view, when they take the form of human attitudes towards the earth, are harmful to the natural world, either through neglect in the first case or through aggressive exploitation in the latter. An ecological theology provides the corrective for both of these idolatries in a time of urgent need.

An ecological theology, says Santmire, assigns humanity a triple role in its relationship to the natural world. Humanity is, first, an overlord in creation. To deny this role is to abdicate humanity's God-given responsibilities in the world. Even though the overlord role of humanity has caused tremendous damage to the natural world in the past, this is still an important role, provided it is: tempered with a respect for the rights of all creatures of the earth; directed towards restoration of the natural world; and accompanied by conscious and deliberate changes in lifestyle and seeking moral alternatives.[30]

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[28] "An idolatrous relationship to nature has occasioned what is always close on the heels of idolatry, an easy acceptance of an unjust status quo. If God is in the wilds and not with men in the city, he must not really care much about the problems of the city." Santmire, Brother Earth, 179.

[29] "If God has tied his providence to the 'progress' of mankind and given man dominion over nature and a manifest destiny, nature becomes merely the raw material for the glorification of man." Santmire, Brother Earth, 179.

[30] Santmire, Brother Earth, 184 - 185.

Humanity's second role is that of caretaker. Humanity as caretaker: attempts to create and maintain balance in nature; cares for nature for nature's own sake, as well as for the sake of other human beings, especially the poor; and works towards the survival of the quantity and quality of all living things.[31]

Finally, humanity's third role in nature is that of wondering onlooker. As humanity wonders at the beauty of the earth, they are moved to act, delight, and rejoice in all that God has created.[32]

Santmire's unique contribution to the Genesis and ecology debate, at this early stage, is that he opens more of the Bible to the debate. Lynn White, the initiator of the debate, latches on to three verses of Genesis (1:26-28), finds within them what he believes is an attitude that is detrimental to the natural world, and declares Christianity guilty of causing the ecological crisis. Santmire, on the other hand, reminds his readers that there is more to the Bible than three verses of Genesis. Not only does he open up the entire Bible, both Testaments, to the Genesis and ecology debate, he also invests some time in studying the history of biblical interpretation,[33] and early Christian worship practices[34] – for these, too, are modern Christianity's influences.

Even though Santmire's biblical study is wider, it is not deeper. He is

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[31] Santmire, Brother Earth, 186-189.
[32] Santmire, Brother Earth, 190-191.
[33] See, for example, his analysis of the theologies of Barth and Brunner. Santmire, Brother Earth, 81.
[34] Santmire, Brother Earth, 91.

prone to proof-texting, motivated mostly by an assumption that the Bible is wholly consistent in its attitude towards nature. For example, he says that, in the New Testament, "we find most of the colors and the lesser lines of the biblical picture of nature in the Old Testament."[35] Having made this statement, he proceeds to interpret the New Testament in light of his findings in the Hebrew Bible, without further justifying his claim that the two Testaments are consistent in their attitude towards the natural world.[36] Perhaps, though, since his intended audience is a Christian one, and not necessarily a scholarly one, he does not feel a need to justify such a claim.

Santmire's biblical study strains, from time to time, under his desire to present consistency. For example, he quotes Jesus's saying in Matthew's gospel, "Consider the lilies of the field, how they grow; they neither toil nor spin," as evidence that "God is fond of beautiful flowers and fond of birds."[37] Surely this is not the point of the saying. It continues, "yet I tell you that Solomon in all his glory was not arrayed like one of these" – an indication that, however important the birds and flowers are, humans are more important.[38] The entire saying is less than encouraging for developing an ecological theology.

The overall framework of Santmire's book is shaped by his background as

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[35] Santmire, Brother Earth, 82.

[36] Neither does he further justify his claim that even the Hebrew Bible presents a wholly consistent view. God could hardly be called an environmentalist for destroying the earth in the flood or in Sodom and Gomorrah, or through warfare or "acts of God."

[37] Santmire, Brother Earth, 84.

[38] Matt. 6: 28-29.

a Lutheran pastor. The categories of redemption, salvation, and last judgement, are alien to many of the biblical passages he studies, especially from the Hebrew Bible. Much of his work sounds like traditional church doctrine, reworded with an environmentally-friendly spin. The entire book is a defense of Christianity.

Though he never, like some other authors in this debate, completely releases Christianity from any hint of involvement in the environmental crisis, he does say that the church's failure has been inadequate attention to its own scriptures and teachings, and too much influence from outside ideas. For example, the Appendix to Brother Earth explains that the idea that nature is fallen comes from "extra-biblical sources, especially the mythological-philosophical speculation of the platonic tradition (taken up by Origen) and the mythology of Persian dualism."[39] Elsewhere he says that the central teaching of Christian theology, the Kingdom of God (or of Christ), calls humanity to a responsible relationship with nature:

> The Kingdom of Christ is a power given graciously to restore man to his rightful responsibility, a gift of new freedom to be authentically human. That is the faith of the Church, however dimly individual Christians may have perceived it, however falteringly the Church as a whole may have followed it.[40]

Overall, Santmire leaves the reader with the impression that, had Christians always adhered to their biblical roots and refused to become corrupted by

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[39] Santmire, Brother Earth, 192.
[40] Santmire, Brother Earth, 183.

outside influences, the environmental crisis would never have happened, or at least Christianity would not have been part of the problem.

Brother Earth can be easily criticized, but to be fair Santmire must be given a little benefit of the doubt. It is still very early in the Genesis and ecology debate in 1970, and Santmire, by his own admission, is entering into a realm of theology that has seldom been explored.[41] Even in 1985 he laments that few theologians have dared to consider an ecological interpretation of the Bible, and that some are even hostile towards such an attempt:

> According to a large number of contemporary theological writers . . . Christian theology never has had, not should it have, a substantive ecological dimension. These writers are convinced that Christian theology must focus primarily – even exclusively – on human history, not on the history of nature. A substantive Christian theology of nature, in their view, is a contradiction in terms.[42]

The weakness and tentativeness of Santmire's first contribution to the Genesis and ecology debate can be excused, then, on the grounds that he is a pioneer in a strange land.[43]

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[41] "It would obviously be preferable at this point if we could simply summarize the works of biblical scholarship (particularly in the contemporary period) which deal with the biblical approach to nature. But . . . 'nature' as a theme with its own import has not directly concerned most biblical scholars to this very day." Santmire, Brother Earth, 81.

[42] Santmire, Travail of Nature, 3.

[43] Santmire's second major contribution to the Genesis and ecology debate, The Travail of Nature: The Ambiguous Promise of Christian Theology, takes a much more mature approach to the issues. In this work, Santmire hardly asks the question at all of what the Bible has to say about nature. Instead he asks the question: How, historically, has the Bible been interpreted?

The purpose of The Travail of Nature is to explore of the history of Christian theology in order to find elements within it that can support an ecological theology. To summarize this work briefly, Santmire discovers two major themes, or motifs, in the history of biblical interpretation. One is the spiritual motif, which is fuelled by the metaphor of ascent and, in its most extreme articulations, can lead to a dualistic theology. Santmire, Travail of Nature, 176-181. The second

4.3 Jürgen Moltmann "Creation as an Open System"[44]

God in Creation: An Ecological Doctrine of Creation[45]

In 1979 theologian Jürgen Moltmann published a series of essays on eschatology under the title of The Future of Creation: Collected Essays. One of

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is the ecological motif, which is fuelled by the metaphors of migration to a good land and fecundity and, in its most extreme articulation, can lead to a theology of secularism. Santmire, Travail of Nature, 176-178.

In Santmire's final chapter he proposes that the spiritual motif be put aside entirely and instead a biblical reading based completely on the ecological motif be attempted. This, in turn, can be the basis of an ecological theology. Unfortunately, Santmire applies his method to the Exodus story, with its underlying theme of the promised land. This is unfortunate because Santmire fails almost entirely to apply his ecological motif to the Genesis creation stories. The only exception is a brief mention of Genesis 1 and its "fascination with the earth and its fullness." Santmire, Travail of Nature, 196. Obviously this is a choice Santmire made; he could not have studied the entire Bible in one volume. From the outset of the theology and ecology debate, however, the Genesis creation stories have been established as the battleground. When Lynn White initiated the debate in 1967, he pointed to Genesis 1:26-28 as the definitive proof that Western religion, and particularly Christianity, was the root cause of the ecological crisis. Any scholar who takes up the debate is obliged to address this key passage of the Hebrew Bible. If Santmire's ecological motif can be applied to any part of the Bible (and not just to parts of the Bible that fit easily into an ecological theme), he must demonstrate that his method works with the one part of the Bible that has been used most adamantly to prove that Western theological tradition is, in fact, bankrupt.

That being said, Travail of Nature is otherwise an excellent contribution to the Genesis and ecology debate. By changing the focus from the Bible itself to historical interpretations of the Bible Santmire does not attempt, like so many others involved in the debate, to absolve Christianity or the Bible from all responsibility for the ecological crisis. In fact, he says, Christianity has made a significant contribution to the ecological crisis in the way it has expressed its interpretations of the Bible throughout the history of the church, particularly in the modern period. On the other hand, Santmire does not throw up his hands and abandon Christian theology altogether, either. He is able to find specks of hope in Christianity's past, and then demonstrates how this ecological motif can be revived and made a powerful force in the fight for a healthy earth.

[44] Jürgen Moltmann, The Future of Creation: Colleted Essays (Philadelphia: Fortress Press, 1979): 115-130.

[45] Jürgen Moltmann, God in Creation: An ecological doctrine of creation (London: SCM Press Ltd., 1985).

those essays, "Creation as an Open System," bears particular relevance on this thesis. In 1985, Moltmann published God in Creation: An Ecological Doctrine of Creation. God in Creation is largely an expansion of and elaboration on the earlier essay, including many issues not at all relevant to this thesis, and so it will only be referred to here in order to expand on the ideas in the shorter work.

In the opening paragraph of "Creation as an Open System," Moltmann says that part of his purpose in writing is to create a new marriage of science and religion. Echoing, though not directly referring to, Lynn White, he says that the ecological crisis has been the product of science and religion together, and therefore the solution must also involve both disciplines:

> The ecological crisis caused by the progressive destruction of nature was brought about by Christianity and science together; and if man and nature want to win a chance to survive, then Christianity and science must together revise both the picture of man found in the traditional belief in creation ('subdue the earth', Gen. 1.28) and the picture of man reflected in Cartesian science ('Maître et possesseur de la nature').[46]

Christianity and science together can produce a solution to the environmental crisis together, says Moltmann, but only if both revisit some of their most basic assumptions.

The problem with Christian theology, or dogmatics, says Moltmann, is the relationship it has drawn between creation and redemption. Creation is seen as the perfect state of the world that was created by God before the beginning of

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[46] Moltmann, The Future of Creation, 115.

time, and redemption is seen as an identical state that will be created after the end of time. Between the two extremes is only the history of the Fall, in which imperfect humanity lives in an imperfect world. This serves to create a circular notion of time:

> What, then, is history? It is first of all paradise lost, then the road to exile. What is redemption? It is the way back and, as the final outcome, paradise regained. Sin perverts the good creation. Grace restores it. What emerges from the history of sin and grace is the good creation as it was originally.[47]

By understanding redemption as a return to original perfection, Christian theology creates a "symmetrical, circular" view of history that begins and ends with identical perfection, with only less-than-perfection, or sin, in between.

The problem with this view of history, says Moltmann, is that it allows no human action towards improvement in the time between the beginning and the end of time:

> History between creation and redemption is then primarily the history of the Fall. It cannot bring anything new, except the increasing deterioration and ageing of the earth. Only redemption will restore creation.[48]

This, according to Moltmann, has been Christianity's contribution to the ecological crisis: since perfection of humanity and the earth existed only before the beginning of time, and can only exist again after the end of time, humanity is helpless to work towards improvement of the conditions of the earth in the

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[47] Moltmann, Future of Creation, 116-117.
[48] Moltmann, Future of Creation, 116.

interim period.

This belief, that perfection lies outside of historical time, is fuelled in part by the idea that creation is, as Moltmann calls it, a closed system. By a closed system he means a one-time act, complete and perfect:

> Consequently when we talk about creation, we instinctively think, theologically, about the original state of the world and the beginning of all things, imagining them as a condition that was once finished, complete in itself and perfect. Belief in creation repeats the judgement of the Creator over his creation: 'Behold, it was very good.'[49]

Traditional Christian theology, according to Moltmann, defines creation as a complete act, separate from history, before the beginning of time. Therefore creation is non-historical, or outside of history. History begins only at the Fall.

The traditional idea of creation as a closed system, says Moltmann, must be rejected in the light of modern biblical exegesis. He mentions the following points from biblical analysis of the Hebrew Bible that count against such an understanding: First, ancient Israel's belief in creation arose from a historical experience of God; first they experienced God in the exodus, then they wrote the stories of creation. Second, in the creation stories, creation is the beginning of history, oriented towards the future. History, in ancient Israel's view, was defined as God's acts in history; creation was the first of those acts. Third, the first words of Genesis, "In the beginning God created," establishes the beginning of time at the beginning of creation. With time comes the possibility for change,

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[49] Moltmann, Future of Creation, 116.

"for time is only perceived from alteration." Furthermore, the time that begins in creation is not symmetrical or cyclical, but "is open for a future which does not have to be the return of what was at the beginning." The future being pointed to in the P creation story is the sabbath; the future of the J story is the blessing of Abraham.[50]

This exegesis of the Hebrew Bible leads Moltmann to say that theology, when speaking of creation, cannot limit "creation" to creation in the beginning:

> It follows from this that theology must talk about creation not only at the beginning, but also in history and at the end. This is to say, we must have in view the total process of divine creative activity.[51]

Creation is not a closed system, then, as traditional dogmatics has assumed, but an open system, ranging from the beginning of time, throughout history, to the end of time and final redemption.

A theology of creation must embrace creation in the beginning, creation in history, and creation at the end, says Moltmann. In the beginning, God creates out of an "inner necessity," the need to create "something that corresponds to him and gives him pleasure." In the beginning time is created, with the possibility for change. The beginning time is very good, but not perfect. In freedom and the possibility for change, the original creation is, instead, "perfectable:" "Creation at the beginning is the creation of conditions for the

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[50] Moltmann, Future of Creation, 118.
[51] Moltmann, Future of Creation, 118.

potentialities of creation's history."[52] Creation in the beginning is primarily the creation of order in a world that is continually threatened by the powers of chaos, which Moltmann names "night and sea." The hope for the future of creation is the destruction not only of chaos but of the possibility of chaos: "In the apocalyptic visions of the End-time, on the other hand, the encroaching forces of chaos are absent (Rev. 21.1; 22:5)."[53]

As a theology of creation embraces creation in history, it acknowledges that Israel's understanding of salvation is based on creation. For example, Moltmann notes, "The prophets use the world *bara* more frequently for the divine creation of new, unexpected and unmerited salvation in history than for creation in the beginning."[54] In the Psalms and the prophets, creation, exodus, and the end-time are all seen as belonging to a single perspective. Therefore, creation itself can be seen as an act of salvation:

> Consequently belief in creation also serves God's new creations. That is why creation in the beginning can be praised as an act of salvation, and the redemption can be expected in terms of a new creation.[55]

Creative events in history, or acts of salvation, though, are of a different quality than creation in the beginning: creation in the beginning was an effortless creation by God's word; salvific acts are portrayed as "God's weariness and

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[52] Moltmann, Future of Creation, 120.
[53] Moltmann, Future of Creation, 120.
[54] Moltmann, Future of Creation, 121.
[55] Moltmann, Future of Creation, 121.

labour."

Creation is not only a open system, as Moltmann calls it, but also a process of divine opening. Human sin results in the closing of open systems:

> Having called creation in the beginning a system open for time and potentiality, we can understand sin and slavery as the self-closing of open systems against their own time and their own potentialities. If a person closes himself against his potentialities, then he is fixing himself on his present reality and trying to uphold what is present, and to maintain the present against possible changes.[56]

Sin, then, is the human closing of what God has opened. What is true for individuals is also true for societies. A society which closes itself to possible change ends up justifying the status quo, and in this way surrenders its freedom. Such a self-closing ultimately results in self-destruction.

Salvation, on the other hand, is the opening of closed systems:

> The closed or isolated person is freed for liberty and for his own future. A closed society is brought to life so that it can look upon the future as being the transformation of itself.[57]

Arguing against what he perceives as traditional theology, Moltmann says that creation in the beginning is the creation of time, which is an open system, open to change and potential. Human sin closes open systems, and prevents change and transformation. God's creation within history is the opening of systems that have been closed by humanity, in order to provide opportunities for transformation and growth. The traditional concept of creation as a closed

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[56] Moltmann, Future of Creation, 122.
[57] Moltmann, Future of Creation, 122.

system does not allow for the possibility for change or transformation until the new creation is established at the end of time. Creation as an open system, as described by Moltmann, allows each moment to be a chance for change when God's grace breaks open the closed systems created by humankind.

If creation in history is the formation of increasingly open systems, creation at the end is the establishment of the universal opening. Creation is completed with God's indwelling in creation through the Holy Spirit:

> The completing of the creative process in the kingdom of glory is presented as God's indwelling in the new creation. . . . It is no longer merely heaven that is named as the place where God dwells; heaven and earth are now newly created, so that God himself may dwell in them . . . In the consummation, the hidden, anticipatory indwelling of God in temple and people are to be universally fulfilled. At the creation in the beginning there was as yet no talk of such an indwelling. But creation was to be open for that, and for that it was designed.[58]

As the above quotation indicates, Moltmann must now turn away from the Hebrew Bible to the New Testament in order to complete his discussion of creation. Creation at the end, he says, referring to Paul's letter to the Romans, restores humanity to the image of God in which it was created.

What, then, from Christian tradition and the Bible can be maintained in a theology of creation? Moltmann says that the commands in Genesis 1:28 for humanity to have dominion, subdue the earth, and multiply are no longer humanity's true destiny. To say it is, is to interpret creation as a closed system (because of humanity's unchanging role), which it is not. Such a

misunderstanding would not have been made if the commandments in the P creation story were interpreted in light of later traditions:

> People did not read this designation in the Priestly Document in the light of the history of tradition, seeing it in the context of earlier texts such as the Yahwist (who interpreted this 'having dominion' as 'tilling and keeping'), or in the light of later Old and New Testament passages. What followed was a one-sided stress on man's special position in the cosmos. Man is the subject who rules; all other creatures are subject to him and are his objects.[59]

To interpret Genesis 1:26-28 as the destiny of humankind is to take these verses out of their context – a context that Moltmann defines as the rest of the Bible, Old and New Testaments.

Human destiny has frequently been interpreted in terms of having dominion and subduing the earth and, interestingly, the two historical figures whom Moltmann mentions are the same ones Cameron Wybrow focuses on – Francis Bacon and Rene Descartes:

> Through science man was to become, according to Descartes, 'maître et possesseur de la nature' – i.e., was to fulfil the destiny for which he had been created. Because he understood redemption from the Fall as being the restoration of original creation, Francis Bacon declared that the goal of the scientific knowledge of nature was 'the restitution and reinvesting (in great part) of man to the sovereignty and power . . . which he had in his first state of creation'. The restoration of man's universal rule through science and technology was to make man again God's image on earth.[60]

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[58] Moltmann, Future of Creation, 125.
[59] Moltmann, Future of Creation, 127.
[60] Moltmann, Future of Creation, 128.

The interpretation of humanity's purpose or destiny as having dominion and subduing the earth, such as that of Bacon and Descartes, is Christian theology's contribution to the environmental crisis.

What is implied here, though never stated directly, is that, because creation is an open system, humanity's purpose is constantly evolving. If creation were a closed system – that is, if creation were destined to return to its original state – humanity's purpose would remain constant. Humanity was created to have dominion over the earth, and will be restored to that position at the end of time. In the interim, our purpose is to live out that commandment as best as possible in a sinful and fallen world. This is the belief exemplified in Bacon and Descartes. Moltmann seems to be saying that, at the Fall, humanity lost its image of God[61] and, with it, their right to dominion. Because creation is not destined to return to its original state, but towards a new and different creation, humanity's role in creation is also changing into something new. The commands of Genesis 1:26-28 are no longer relevant to our current situation. Those commands were meant for humanity in the beginning. Now humanity is in a different stage of creation – creation in history – and so humanity's role, too, has changed.

What, then, is humanity's role in creation in history? If creation is an

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[61] Though Moltmann never explicitly says that humanity loses its image of God, he does indicate that it will be restored at the end of time, thus implying that it had been lost.

open system, and history is the process of God's opening of closed systems leading to the ultimate opening at the end of time, then humanity's purpose in history is to create openness, characterized by communication and cooperation:

> The recognition of complex open systems in the environment demands a model based on a theory of communication. Two subjects with, of course, different subjectivity enter into a mutual relationship with one another. Wherever we come across undetermined behaviour in natural systems, we can talk about subjectivity or 'freedom of choice'. The more science advances towards the recognition of more complex systems, the more . . . it will offer findings showing that, out of consideration for our partner 'environment', we must not do what we would be able to do.[62]

The role of humanity now, says Moltmann, is to live in cooperation and communication with the natural world around us, creating increasing openness within humanity, between humanity and God, and between humanity and nature.[63] Here, the marriage of science and religion that he set out to achieve in the beginning of his work takes form: just as science has begun to discover that biological organisms thrive through cooperation and symbiosis, not competition, symbiosis between human and non-human is the present and future goal for humanity.

Christianity can take the lead in this endeavour as it reevaluates previously-held values and seeks to live in the servant model of Jesus, says

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[62] Moltmann, Future of Creation, 129.

[63] According to Moltmann humanity cannot become, once again, the image of God through the subjugation of the earth. He bases this statement not on the Hebrew Bible, but on the example of Christ: "For the Christian faith, Christ is 'true man' and 'the image of God' on earth. That is why 'all authority in heaven and on earth' has been given to him (Matt. 28.18). But he came 'not to be served' – not to rule – 'but to serve'. . . . In the light of Christ's mission,

Moltmann. The ethics produced by such a theology are solidarity, peace, fellowship, social justice combined with justice for the natural environment, and authentic interdependence. Interdependence is "the symbiosis between different systems of life, and is the basis for common survival."[64] The understanding of creation as an open system is not only more faithful to the biblical texts, but can be the hope for survival in a time when the natural world, and humanity with it, is in mortal danger.

Moltmann's work, like Santmire's before him, has the strength of opening up the Genesis and ecology debate to the entire Christian Bible, without neglecting the key verses discussed throughout the debate (Genesis 1:26-28). If Christianity is to blame for the ecological crisis, as Lynn White suggests, then all of Christianity's traditions and scriptures must be taken into consideration. Moltmann helps to demonstrate the bigger picture of the Bible not only from a theological point of view, but from an exegetical one as well. The creation stories in Genesis are not isolated texts but part of a larger story. The P and J documents, from a source-critical point of view, do not end at Genesis 3, but extend farther into the Hebrew Bible. Individual verses must be interpreted in light of the whole.

Gen. 1.28 will have to be interpreted in an entirely new way . . ." Moltmann, Future of Creation, 129.

[64] Moltmann, Future of Creation, 130.

Two criticisms of Motlmann's contribution to the Genesis and ecology debate come from one of his reviewers, Donald Dawe. First, Dawe notes "the claim of the Roman Catholic Church has on [Moltmann's] life and thoughts."[65] His entire argument revolves around traditional categories of Roman Catholic doctrine, such as redemption / salvation, creation, and the Fall. This becomes most especially evident in Moltmann's later work, God in Creation, which is based entirely on a Trinitarian framework, a concept that is alien to the Hebrew Bible. This causes him frequently to interpret the Hebrew Bible in light of the New Testament without considering the Hebrew Bible on its own merits. For example, he says that the Hebrew Bible testifies almost entirely against a God of immanence, or a God who is present in creation:

> Because it grew up in an environment moulded by pantheistic, matriarchal, animist religions, the belief in Yahweh to which the Old Testament testifies, laboriously and perseveringly taught *the difference* between God and the world: God is not to be understood in worldly terms, and the world must not be interpreted as divine. God does not manifest himself in the forces and rhythms of nature; he reveals himself in human history, which is determined by his covenant and promise.[66]

These statements stand in direct contrast to Santmire's earlier finding that in the Bible, Old and New Testaments, the theme of God's history with nature parallels the theme of God's history with humanity. If the Hebrew Bible says that God has

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[65] Donald G. Dawe, review of The Future of Creation: Collected Essays, by Jürgen Moltmann, Interpretation 35 (April 1981): 214.

[66] Moltmann, God in Creation, 13.

a history with nature, then the foundations for God's immanence can be found there, not only in the New Testament.

Because Moltmann rejects the idea that the Hebrew Bible has anything to say about God's presence within creation, he must turn instead to the New Testament for the basis of his ecological doctrine:

> [An] ecological doctrine of creation today must perceive and teach God's *immanence* in the world. This does not mean departing from the biblical traditions. On the contrary, it means a return to the original truth: through his cosmic Spirit, God the Creator of heaven and earth is present *in* each of his creatures and *in* the fellowship of creation which they share. . . . God is not merely the Creator of the world. He is also the Spirit of the universe.[67]

Because of Moltmann's dependence on Catholic doctrine and, in particular, Trinitarian theology, he often does not give the Hebrew Bible a respectful examination.

Another criticism from Dawe is Moltmann's "intriguing but ultimately frustrating ambiguity of language."[68] Though his criticism is directed at another of the essays collected in The Future of Creation, it applies equally to "Creation as an Open System." At first, Moltmann uses the phrase "open system" to describe how creation was not a one-time event but an on-going process. As the essay unfolds, "open system" refers to societies and individuals who close themselves off from God, each other, and the natural world through sin.

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[67] Moltmann, God in Creation, 14.
[68] Dawe, 219.

Opening systems becomes the goal of humankind but also the prerogative of divine grace. Though the play on words works nicely, it sometimes causes confusion in reading Moltmann and makes defining some of his key terms quite difficult.

A question that is not addressed in Moltmann's work is how Christianity can be both a cause of the environmental crisis and a potential force in the cure. Santmire evades this difficulty by dividing the history of interpretation into two motifs – one which is opposed to an ecological theology, and the other supportive of it; the first contributed to the ecological crisis, and the second can help reverse the damage. Moltmann is quite willing to admit Christianity's involvement in the environmental crisis.[69] Unlike White, however, Moltmann does not locate the connection between the Bible and modern science and technology in the Genesis creation stories. Rather, he finds it in Renaissance interpretations of the Bible:

> Whatever the economic, social and political changes that may require mention, another factor was more important still in determining the way people four hundred years ago saw themselves. This was the new picture of God offered by the Renaissance and by nominalism: God is almighty . . . Consequently God's image on earth, the human being (which in actual practice meant the man) had to strive for power and domination so that he might acquire *his* divinity.[70]

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[69] "The modern industrial countries developed in those parts of the world which were under Christian influence. Here the prevailing systems of value and significance were for a long time determined by the Bible and the church. Even modern secular forms of culture and atheistical philosophies of life still belong to the sphere of influence of the biblical and Christian traditions, even if they dissociate themselves critically from those traditions." Moltmann, God in Creation, 29.

[70] Moltmann, God in Creation, 26-27.

This is the biblical interpretation, mentioned earlier, typified by Descartes and Bacon.

But if Christian interpretations were part of the cause of the ecological crisis, how can Christian theology be part of the solution as well? Moltmann leaves the reader with the impression that the Bible has always contained an environmental ethic, but it has been interpreted wrongly up until the time of his writing. He even suggests that an ecological theology could not have been created until now. He divides the history of the doctrine of creation into three stages, based on its relationship to science. In the first stage, "the biblical traditions and the ancient world's vision of the universe were fused into a religious cosmology." There was no scientific explanation of creation as there is now; science was religion. In the second stage, "the sciences emancipated themselves from this cosmology, while theology detached its doctrine of creation from cosmology altogether, and reduced it to personal belief in creation." Science refused to be bound by religious mythology; religion, to keep the peace, denied that it was talking about factual origins of the universe.

In the third stage, which is only beginning now, science and religion reunite:

> Now they have become companions under the pressure of the ecological crisis and the search for the new direction which both must work for, if human beings are to survive at all on this earth.[71]

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[71] Moltmann, God in Creation, 33-34.

Only now, as science loses confidence in its own infallibility, can it reunite with religion and the two work together towards a solution to the ecological crisis. The idea comes across as being overly optimistic of the present. One is forced to wonder whether, given Christian theology's past, religion can change so dramatically and still remain the same religion. Moltmann's contribution to the Genesis and ecology debate falls under Santmire's criticism of contemporary theologians who, in an attempt to create a new theology, break so obviously from the past that they fail to demonstrate continuity with received tradition.[72]

4.4 Douglas J. Hall
Imaging God: Dominion as Stewardship[73]

An ecological motif penetrates much of the theology of Canadian writer Douglas John Hall, but the one book he dedicates specifically to the environmental theme is Imaging God, published in 1986. It is the third of a trilogy of books on stewardship, commissioned by the National Council of Churches' Commission on Stewardship. Hall is a United Church minister and was, at the time, professor of theology at McGill University.

Hall compensates for the weaknesses of both of the theologians studied

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[72] Santmire, Travail of Nature, 5.

[73] Douglas John Hall, Imaging God: Dominion as Stewardship (New York: Friendship Press, 1986).

previously in this thesis. Unlike Santmire (in Travail of Nature), Hall does not avoid the controversial verses of Genesis that began this debate or its key phrase, "image of God." His entire book, in fact, is an attempt at redefining the *imago Dei* based on biblical sources and the needs of contemporary theology. Unlike Moltmann, Hall does not break entirely from received tradition in order to carry out his task but, like Santmire, demonstrates that his "new" definition is in line with the thinking of certain theologians of the past.

Hall's first task, therefore, is to summarize the history of interpretation of the phrase "image of God," as it is found in Genesis. He concentrates his analysis of the Hebrew Bible on the only three verses that contain the word *ṣelem*, all from the P source: Genesis 1:26-28, where humanity is created in the image and likeness of God and given dominion over the living things; Genesis 5:1-3, where Seth is born in Adam's image; and Genesis 8:5-6, where the commandment is given to Noah that forbids murder on the grounds that humanity is created in the image of God.[74]

Before looking into the history of interpretation, Hall considers briefly the influences on these verses of Genesis, and the relationship of image (*ṣelem*) to likeness (*dᵉmût*). Biblical scholars generally date the Priestly source from the fifth century B.C.E., and some suggest that it was influenced by non-Hebraic,

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[74] Hall, Imaging God, 68-69.

Hellenistic ideas.[75] He further notes the difference in emphasis in the J-source creation story:

> It is noted in this connection that, in contrast to the Priestly writer, the Jawhist (J-document) in his account of the creation of the world (Gen. 2) emphasizes humankind's affinity with "the dust"; whereas the tendency of the Priestly code appears to be to stress the human distinction from the basic "stuff" of creation. Although this creature is part of the creative process out of which all the creatures emerge, only this one – *ha Adam* – is "image of God."[76]

Hall questions, however, whether this distinction between the two creation stories is derived purely from the biblical texts or "whether it reflects the bias of Christian interpreters who have been conditioned to think too uncritically in terms of human distinctiveness."[77] As the study unfolds, it becomes clear that Hall sympathizes with the latter suggestion: the difference in humanity's description in the two creation accounts is more a matter of interpretation than what the texts themselves intend.

Next Hall considers the relationship of "image" to "likeness" in Gen. 1: 26-28. In early Christianity, the distinction between these two terms was seen to be of great importance.[78] Modern exegesis, though, Hall says, makes the distinction between the two words obsolete:

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[75] For example, he refers to von Rad and Eichrodt, who think that "the references to 'image of God' do run contrary to the Hebraic insistence on the qualitative distinction between God and humanity." Hall, Imaging God, 69.

[76] Hall, Imaging God, 69.

[77] Hall, Imaging God, 69.

[78] For example, Iranaeus wrote that "likeness" referred to humanity's "original righteousness," which was lost at the Fall, whereas God's "image" remains present even in fallen humanity. Hall, Imaging God, 70.

> The point that has to be made on the basis of Reformation and later biblical scholarship is, of course, that the writer of the Genesis passage intended no such distinction between the two terms. It is a case, rather, of a Hebrew parallelism, that is, a poetic device (often used in the Psalms, for example) whereby a second, matching phrase echoes the basic thought of the first, but in different words.[79]

"Image" and "likeness" are intended as identical terms; therefore, no further study is necessary to differentiate between the two.

Having established this background, Hall begins a study of the meaning of the word "image." He notes that, in the history of interpretation, many suggestions have been made, yet he summarizes them all into four categories. The first interpretation that has often been made is that "image" refers to physical similarity. This would seem to be the obvious interpretation of Genesis 5: 1-3 – Seth resembled Adam, as any child resembles his or her parents. Even if P believed that humanity in some way resembled God physically, says Hall, it is not enough to stop here, "since the body in Hebraic thought is an 'outward manifestation of the reality of which it was a part.'"[80] Even if the primary intended meaning of "image" is physical resemblance, it must also refer to something else.

A second interpretation of "image" links it to the word "dominion," which appears so close in Genesis 1: 26-28. He notes, as others in the Genesis and ecology debate frequently do, that this seems to be the same idea conveyed in

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[79] Hall, Imaging God, 70.
[80] Hall, Imaging God, 70.

Psalm 8, "which celebrates the wonder of the human creature despite its obvious smallness by comparison with 'the heavens.'"[81] Nevertheless, he notes that biblical scholars have denied the connection of "image" and "dominion" on the grounds that "the language does not warrant our equating the two concepts," and the word "image" does not appear at all in Psalm 8.

Furthermore, Hall says, the way in which the word "dominion" is used in Genesis 1:28 does not suggest "that God intends the human being to exercise absolute authority over all the other creatures – to 'play God' in creation, as it were."[82] Still, the proximity of the words "image" and "dominion" does not allow the interpreter to dissociate the two words entirely. Obviously the text implies that humanity is given a special role in creation, but what that role is defined as depends on the interpreter's understanding of the God whom humanity is supposed to image. To define "dominion" the reader must ignore contemporary understandings of the word and, instead, consider what the Bible says about God:

> If we take seriously that the God actually described for us in the continuity of the Testaments is a serving, loving, suffering God, and no potentate, then we might well reclaim a genuine and indeed an apologetically provocative ("jarring") connection between *imago* and *dominium*.[83]

Hall then turns from the Hebrew Bible to the New Testament, pointing to Jesus

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[81] Hall, Imaging God, 71.
[82] Hall, Imaging God, 71.
[83] Hall, Imaging God, 71-72.

as the "fullest exemplification of the sovereignty of divine love." If this understanding of God – one which Hall claims is consistent throughout the Bible – is the one on which the interpreter operates, then the definition of "dominion" in God's "image" must reflect that understanding – that is, the dominion of humanity must image the dominion of God.

Hall's third definition of "image," derived mainly from the writings of Barth, is that humanity, as the image of God, is created as a counterpart to God. This counterpart has two elements. First, though humanity is different from God, they are able to relate to God in a special way: "What God wills in the creation of the human, Barth insists, is 'a being which in all its non-deity and therefore its differentiation can be a real partner.'" Second, humanity images God in their plurality:

> This fact, [Barth] believes, lies behind the plurality of the form of speech "Let *us* make . . ." . . . The human creature is therefore created imaging God inasmuch as its being is at once fully a relational being, a partnership, a coexistence – "male and female."[84]

Hall notes that Barth's exegesis has met with much criticism, yet he believes it moves "in the right direction" – away from "image" as a quality of humanity, towards a relational understanding.[85]

The fourth explanation Hall mentions, derived from Westermann, is that "image" is not a declaration about "man," but about the act of creation. As such,

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[84] Hall, Imaging God, 72.
[85] Hall, Imaging God, 73.

it is not a statement about humanity, except in its relationship to God. Quoting Westermann, Hall says:

> The creation of man in God's image is directed to something happening between God and man. The creator created a creature that corresponds to him, to whom he can speak, and who can hear him.[86]

Though the issue is not entirely clear in Hall, the point he, and Westermann, seem to be making is that humanity in the image of God cannot be understood outside of God doing the creating. God created humanity – not just a man, but all of humanity – to be responsive to God.

Hall concludes his word study of "image" in the Hebrew Bible by acknowledging its infrequent occurrence. How can such a symbol be so important in the history of Christian doctrine when there are only three direct references to "image" in the entire Hebrew Bible? He answers, first, that even though the word "image" itself is rare in the Hebrew Bible, the "sentiment" is common:

> First, while the term as such is indeed rare in the Old Testament, the sentiment for which it would seem to stand – not its precise meaning necessarily, but its underlying affirmation – is by no means unique. Although, as has often been pointed out, the Old Testament does not provide an explicit anthropology, the presupposition of its whole witness, including its description of God, is that the human creature, though undoubtedly creation's greatest troublemaker, stands in a relationship with God and with the rest of creation that is both unique and central.[87]

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[86] Hall, Imaging God, 74.
[87] Hall, Imaging God, 75.

Though the phrase "image of God" is rare, the idea that humanity was created in and for a special relationship with God is consistent in the Hebrew Bible. Hall finds it significant that the Bible expresses no interest in God beyond God's relationship to creation.[88] Furthermore, the "image" symbol has become influential in Christian theology because of its interpretations in Christian texts, such as Paul's letter to the Romans, and the early creeds.[89]

Beginning with this biblical analysis, followed by considerably longer sections of New Testament study and a consideration of the history of the "image" symbol's interpretation, Hall concludes that "the tradition of Jerusalem"[90] expresses the belief that humanity was created to be in relationship.[91] This was discovered in modern times by the Reformers who, as students of the Bible, realized that the Bible is nothing more (and nothing less) than a story about relationships:

> [This] record of a people's history; these complex narratives of the often dramatic relationships between fathers and sons, mothers and children, brothers and brothers, lovers, rivals; these anguished prayers and inspired praises; these dialogues with God and with one another; these stories, steeped in particularity; this tale of wandering, of fiercely remembered promises, of prophetic rage, of apocalyptic spontaneity, of despair and vision . . . [showed the Reformers that] the whole presentation of truth in

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[88] "There is no interest in the Judeo-Christian scriptures in God-alone, such as one finds in some religious and philosophical traditions." Hall, Imaging God, 119.

[89] Hall, Imaging God, 75.

[90] In Hall's writing, "the tradition of Jerusalem" includes the Hebrew Bible and parts of the New Testament that have not been affected by Greek influences, or "the tradition of Athens."

[91] Specifically, the relationship humanity was created for is love: "Relatedness – and specifically the modality of relatedness designated by the biblical word 'love' (*agape, hesed*) – is the essence of our humanity as the Creator-Redeemer of this tradition intends it." Hall, Imaging God, 113.

> the one source they took to be absolutely and finally binding (*sola Scriptura*) was relational.[92]

The Bible is about relationships. The logical conclusion to this, according to Hall, is that humanity is about relationships.

In the majority of the history of interpretation, Hall notes, the image of God that humanity was thought to possess was a quality, characteristic, or substance. Since humanity alone, in Genesis, is created in God's image, interpreters have defined "image" as the qualities that distinguish humanity from the rest of nature. These qualities, in turn, have become the basis of value for modern, Western society:

> To possess a superior intellect, to exercise unusual daring, insight, and decisiveness in our choices, to be exceptionally dexterous manually and technically – such as the aptitudes we covet for ourselves and our progeny. If, along the way, we can also manage to be popular, genial, and civil on our associations with others, and generally well-rounded personalities, this is naturally a bonus.[93]

Because Christian theology has taught that being in God's image endows humanity with characteristics that elevate them above the animals, these qualities have been given special importance, and relationships have been seen as secondary.

According to Hall, though, the tradition of Jerusalem says that these qualities we value are means, not ends – means to creating relationships:

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[92] Hall, Imaging God, 114.
[93] Hall, Imaging God, 116.

> You were given these endowments, these capacities for understanding and willing, making and doing, in order to enter into and sustain at some depth the relationships with the counterparts of your being, apart from whom you are "hollow" beings.[94]

According to the Bible, says Hall, relationships are of utmost importance, and any special capacities human beings possess are intended for entering into and sustaining relationships. Being, then is "being-with." In German the word for this is "*Mitsein*" and, Hall believes, it is very close to the Hebrew word "Shalom," "a word used by the Hebrews to express what they believed to be 'God's intention for creation.'"[95]

This understanding of humanity's purpose as being in relationship, *Mitsein*, evolves naturally from the biblical understanding of God. God creates beings to participate in God's overflowing *Mitsein*. Creation and covenant are both directed towards ever-increasing relationship:

> [Not] only the steadfast love (*hesed*) but also the anger, wrath, jealousy of this God all betray God's apparently innate drive toward an ever more actualized relatedness: "I will be your God, and you will be my people!"[96]

In the Bible, all being is being-with, or being in relationship. Significantly, Hall says, this is a being-with, not a being-in – God is present with creation, not present in creation. This is the meaning of Emmanuel: God with us.[97]

If, then, God's essence is being with creation, humanity's task and goal,

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[94] Hall, Imaging God, 116.
[95] Hall, Imaging God, 118.
[96] Hall, Imaging God, 119.
[97] See Isaiah 7:4, Matthew 1:23.

as the image of God, involves being-with. There are three interrelated aspects to humanity's relatedness: being with God, being with other humans, and being with creation.[98] The third aspect of human relatedness, being with nature, is not explicitly mentioned in the Bible, but is compatible with its overall attitude towards nature and life:

> It is not unimportant that we may find in the Bible explicit pointers in the direction of this love for the natural order: in its creation sagas, in many of the psalms and much of the wisdom literature (for example, the famous address to Job out of the whirlwind), in various laws of the older covenant protecting the rights of animals, in the teachings and remembered acts of Jesus, and so forth.[99]

The third aspect of human relatedness, though never articulated in the Bible, lay carefully beneath the surface of the biblical texts, waiting for an opportunity to be unearthed. That opportunity has now arrived with the awareness of "an inestimable threat to otherkind."[100]

The implication in all of Hall's study is that the image of God is not something which humanity possesses, but rather a task to which humanity is called. God is God-with, or God in relationship; therefore humanity is called to be in relationship with God, with humanity, and with nature, in order to image or reflect God's essence:

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[98] The first two elements of human relatedness are explicit in the Bible, specifically in Jesus's summary of the law: love of God and love of neighbour. Furthermore, these two relationships are inseparable: "neighbour love implies love of God," and vice versa. Hall, Imaging God, 124.

[99] Hall, Imaging God, 124.

[100] Hall, Imaging God, 127.

> Humanity in God's intention means existing in dynamic, harmonious relationships with these three counterparts of our being. To be *imago Dei* implies that, standing with the relationship with God, the human creature reflects God's vicarious and gracious *Mitsein* in its life vis-à-vis these others.[101]

If humanity's purpose is to image God through relationship, then sin is the breaking of relationships:

> By contrast, sins in this same tradition is a condition not only of being-alone (attempting autonomy) but also being-against. At bottom, sin is quite simply the negation (or the attempt at negating) of the relational structuring of the being for which we were created.[102]

Hall turns the image of God from a noun to a verb: imaging God is humanity's task and purpose, in being with God, humanity, and nature.

What, according to Hall, is Christianity's relationship to the ecological crisis? He does not deny any involvement, as other participants in the Genesis and ecology debate are prone to do. "Perhaps our [Christian] conception of God is itself a significant aspect of the problem."[103] Furthermore, unlike Santmire's Brother Earth and Moltmann's "Creation as an Open System," Hall does not suggest that the Bible is wholly consistent in the attitude towards nature it expresses. He says, "It is also true that there are fewer, and less impressive, references to the natural world in Scripture than we should be happy to find there (in light of the present crisis of the environment)."[104] But the Bible's very

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[101] Hall, Imaging God, 127.
[102] Hall, Imaging God, 128.
[103] Hall, Imaging God, 16.
[104] Hall, Imaging God, 124.

ambiguity towards humanity's role in nature is the key for an environmental theology, in Hall's opinion. The Bible accentuates both "the centrality of the human being in the scheme of things" and, particularly in the Old Testament, "the solidarity of humankind with all other created things."[105] The problem arises, says Hall, when either of these images of the human becomes overemphasized.

Christianity's complicity in the ecological crisis arises from a failure to carry out the prophetic duty to challenge the status quo. The starting-point of theology, says Hall, is "something is wrong." But a great number of Christians attend church to find sanctuary and comfort:

> And when so many of us citizens of First World societies – where it is still possible, with a little luck, to sustain the illusion of well-being – make it our aim to assure ourselves regularly that nothing is seriously amiss, we simply compound the deepening crisis of our planet. Not only do we deceive ourselves, but we perpetuate systems of injustice, oppression, and want by which other human beings are daily humiliated. Our illusion of calm is purchased at a very high price.[106]

The desire of many Christians for comfort and sanctuary from world problems has led them to justify the status quo with their own theology. For example, overemphasis on the biblical theme of human distinctiveness has been used to justify the exploitation of the natural world, which has only added fuel to the fire. Failure to challenge society's values with the Bible's ambiguous attitude towards

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[105] Hall, Imaging God, 53.
[106] Hall, Imaging God, 2.

nature has been Christianity's contribution to the ecological crisis.

In Douglas Hall, the Genesis and ecology debate reaches a certain maturity. His biblical exegesis is thorough and respectful of trends in contemporary biblical scholarship, such as source criticism. He studies the Hebrew Bible and New Testament independently, not reading the New Testament back into the Old, or vice versa. He only draws comparisons between Old and New Testament texts in order to demonstrate a consistency of theme between the two parts of the Christian Bible. Many of his conclusions do not arise directly from the biblical texts, but he is persuasive in demonstrating their consistency with biblical themes.[107]

The only substantial critique that comes from Hall's reviewers is the accusation that his study lacks an awareness of feminist issues:

> It is also an important book because it reminds us how strange and tragic it is that even for a male theologian committed to such reconceptualizing, his feminist colleagues-in-thought are still invisible and their work ignored. How can men "be-with" non-human creation when they cannot "be-with" their human partner, woman? Is it possible that if men cannot discover their solidarity with women, they will never experience their solidarity with nature? Somehow the two are deeply related.[108]

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[107] For example, Hall argues that, in the Sermon on the Mount, Jesus simply spells out the full implications of Hebrew law. He is not saying anything new, but rather "in the light of contextual realities of which he was especially conscious, he gave expression to commands that he believed were already implicit in the tradition." In the same way, the new commandment that Hall is issuing in his book, "love nature," is not new, but an announcement "that the love of the natural order is already implicit in the biblical ontology." Hall, Imaging God, 126.

[108] Elizabeth Dodson Gray, review of Imaging God: Dominion as Stewardship, by Douglas John Hall, Theology Today 45 (April 1988), 104.

Though this criticism does not seem like an obvious one, except to someone approaching theology from a feminist viewpoint, it does point out the direction which the Genesis and ecology debate will take after Hall. The non-Religious Studies authors gave up the debate, for the most part, after the early 1970s. Biblical scholars contributed the most to the debate in the mid-70s, with the exception of a few who returned to the topic in the early 90s. The main-line theologians picked up from the first wave of biblical scholars in the late-70s and early to mid-80s. From this point on, the debate will be almost entirely in the hands of the feminist theologians, who will find, as the quotation above suggests, a particular relevance of the Genesis and ecology debate to feminist issues.

4.5 Anne Primavesi
From Apocalypse to Genesis: Ecology, Feminism and Christianity[109]

In 1991, Anne Primavesi was a teacher at Schumacher College in Devon, England, with an interest in ecological issues.[110] Her book, From Apocalypse to Genesis, provides one of the most thorough exegeses of the Genesis creation

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[109] Anne Primavesi, From Apocalypse to Genesis: Ecology, Feminism and Christianity (Minneapolis: Fortress Press, 1991).

[110] H. Paul Santmire, review of From Apocalypse to Genesis: Ecology, Feminism and Christianity, by Anne Primavesi, Christian Century 109 (15 April 1992), 403-404.

stories in the Genesis and ecology debate, and serves this thesis as a fine example of feminist scholars' contributions to the debate.[111] The book is divided into three main sections. The first deals with the relationship between feminism and ecology, the second looks at Christian apocalyptic imagery and its relevance to the ecological crisis, and the third provides a critique of the most common traditional understanding of the Genesis creation stories while providing an alternative interpretation.

Primavesi names her methodology "ecofeminism," a marriage of ecology and feminism.[112] The connection between feminism and ecology, in short, according to Primavesi, is that in Western society men have usually envisioned themselves as having power over both women and nature. She does a thorough

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[111] From the mid-1980s onwards, feminist theologians provided much scholarship on ecological matters. One of the first feminists to apply her methodology to ecological concerns was Sallie McFague with her Models of God: Theology for an Ecological, Nuclear Age (Philadelphia: Fortress Press, 1987). This work, while an excellent discussion of ecology within a theological framework, does not deal directly with the Genesis creation stories, and therefore is not discussed in detail in this thesis.

The job of the theologian, according to McFague, is to state the core message of Christianity in metaphors relevant to the context: "I have claimed that [theology] remythologizes in the sense that the theologian as poet-philosopher attempts to identify primary metaphors and models from contemporary experience and elucidate their conceptual implications in order to express Christian faith for our day in powerful, persuasive ways." McFague, 35. Instead of reinterpreting the Genesis creation stories, as many scholars in this debate have done, McFague chooses instead to turn her back on many traditional metaphors and images used for God's relationship to the world, including those images and metaphors found in the Bible, and to replace them instead with ones more relevant to her context (the world as God's body, God as mother, God as lover, and God as friend). The very fact that McFague has little to say about the Genesis creation stories says much: the metaphors in those stories, she is saying, are no longer appropriate to the context in which Christianity finds itself.

[112] In the Preface, Primavesi states that the term "ecofeminism" is intended to indicate an equal mix of feminism and ecology, even though the expression itself may carry the connotation of "feminism with an ecological slant." She proposes instead the term "femino-ecologist" as a more balanced alternative, but as this neologism is very awkward, she chooses to use the first. Primavesi, ix-x.

anthropological study of the origin of both these attitudes, which she locates in the scientific revolution and its coinciding utilitarian view of the world.[113] This fragmentation of the world, this separation "between the user and the used," which springs from hierarchical systems, is the point at which ecology meets feminism:

> Ecofeminism stresses the connection between woman and Nature on the grounds that Nature, in our distanced, masculine-scientific culture, has also been made "other", something essentially different from the dominant human male who has an unlimited right to exploit "mother" earth.[114]

With rigorous analysis and numerous examples, Primavesi explains that this system of hierarchy, which places woman and nature at almost an equal level under the control of man, has become entrenched in society to the point of almost unquestioning acceptance; she refers to this hierarchy as "a state of consciousness."[115]

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[113] "What is being described is *total* utilitarianism, the principle that anything non-human has no value, only use. And even that qualification can disappear. It is possible to objectify human beings also, as units of production or of wealth or war, and treat them accordingly." Primavesi, 16-17.

[114] Primavesi, 42. Or in another place: "'Earthly' bodies are there to produce and reproduce under the control of men. In such a hierarchical society, women are 'lower' than men and Nature 'lower' than women, which leave both subject to male control, 'objectified' for experiment in the name of science." Primavesi, 40. Or again: "This distortion . . . is seen to be inextricably bound up with the fragmenting of the natural world into discrete objects to be manipulated for man's use. The same cloak of inferiority and unconsciousness was thrown over Nature as over women by Western rational consciousness." Primavesi, 24.

[115] Primavesi, 17. Much more could be said about Primavesi's analysis of hierarchical structures, feminism and its relationship to ecology, dualism, and utilitarianism. Her basic point, as it is for McFague, is that there is an essential connection between language and behaviour: "Therefore ecofeminism, in bringing an ecological paradigm into play from a feminist perspective, sets out to disclose the intrinsic link in a male-dominated culture between how one speaks about women and Nature and how one behaves towards them." Primavesi, 36.

The connection of woman's and nature's role in relation to man becomes especially apparent for Primavesi in the way in which feminine images (in art as well as literature[116]) and language are used for nature:

> Feminine nouns and pronouns are used for Nature which internalize and reinforce assumptions about its role vis-à-vis man. The closest relationship between him and woman is used to describe his proper relationship with the earth: "husbandry." The connotations of this word are carried through when his work with Nature is described as that of the "husband" penetrating virgin forest or soil, sowing seed and raising crops from the fertilized earth beneath his feet.[117]

This equating of woman and nature as hierarchically lower than man receives "religious sanction" in the traditional doctrine of original sin, based on the Genesis creation stories:

> The interpretation of the Genesis text that lies behind this Decree [of Gratian] also rules that Nature, in the form of the serpent, beguiled the woman, and through them not only was Adam led into wrongdoing but all his descendants as well.[118]

Even before the scientific revolution, hierarchical societies used language that indicated a belief in woman's and nature's inherent inferiority to man. In the Christian church this belief was solidified by a particular interpretation of the Genesis creation stories which viewed woman and nature as collaborators in sin.

Primavesi demonstrates the connection between feminist and ecological issues with modern examples as well as historical ones. For example, one of the

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[116] Primavesi, 33.
[117] Primavesi, 34.
[118] Primavesi, 63.

greatest ecological problems today is toxic emissions in the atmosphere. The reduction of emissions, mainly through the decreased use of automobiles and fossil fuels, and the increased use of public transportation, will effect women most profoundly:

> The reduced mobility will be most keenly felt by those women whose employment outside of the home, because of family commitments, is at non-peak hours. . . . In housing estates which are not within walking distance of town centers, those women housebound with small children will feel the psychological effects of being isolated for long hours.[119]

Taking action on ecological issues without taking into account feminist issues will have a negative effect on women. Similarly, taking action on women's issues without taking account of ecological issues will have a negative effect on the environment: "Otherwise, to take a "worst case" scenario, [women] may find themselves equal to men without a planetary stage on which to enact the role of equality."[120] In other words, if women achieve equality with men without at the same time taking into account ecological issues, men and women could become equals as oppressors and destroyers of the planet, which would be doubly bad for Earth.

Having defined her "ecological paradigm," and demonstrated the complex interconnections between ecology and feminism, Primavesi in her second main section poses the question of whether "the same paradigm may be or ought to be used by theologians to interpret the relationship between humanity and the

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[119] Primavesi, 50.

rest of creation." She begins to answer this question with a study of Christian apocalyptic writing, believing the images of "disaster and judgment now in relation to past actions, future solutions or further disasters,"[121] in biblical apocalyptic literature is particularly relevant to the current ecological situation. It is the third main section of Primavesi's book, however, which studies the Genesis creation stories, that is most relevant to this thesis.

Primavesi's section on Genesis is composed of two elements: a critique of the dominant interpretation of the Genesis creation stories, and the construction of a new interpretation – or, more accurately, an attempt at rediscovering the original intention of the stories before the traditional interpretation was forced upon it. She locates the origin of the dominant interpretation, not in Bacon and Descartes, as Wybrow and Moltmann in this debate have, but in Augustine, in the fourth century.

Primavesi outlines the "presuppositions which usually colour our reception of" the Genesis creation stories in a subsection she calls "common perceptions of the Genesis Story." The story is usually perceived as a tragedy: the interconnection of the human, plant, animal, and divine worlds at the beginning of the story is shattered in the end. Furthermore, the story is usually accepted as a story of origins: Adam and Eve are the first humans, or prototypes. God

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[120] Primavesi, 46.
[121] Primavesi, 67.

must be the story-teller; no one else is depicted in the story as being there to witness the events being described. It is commonly assumed that this is a story about sin and humanity's "fall," brought about by Eve's initiative, which results in a punishment designed to keep Eve subordinate and submissive. In this interpretation of the story, it is God who decides that the man should be in control of the woman and the earth.[122]

This interpretation of the Genesis creation stories leads to further assumptions. God is male, and the male human is created first, in God's image. God punishes the humans because they reject God's power over them. God can punish the plants and the animals, too, by forcing them to live under human control – even though they have taken no part in the humans' actions, except for the serpent, and even then only indirectly. Underlying all this is the assumption that God wanted the man and the woman in a certain place and behaving in a certain way. God's desire is more important than human happiness; the true measure of humanity is in its obedience:

> Because God is said to have placed the man and woman in a garden of delights, it is presumed that that is where God wanted them to stay. But God could not keep them there because his will for them was a certain course of action which they refused to follow. His will ranks above his desire for their happiness, though God wanted them to be happy, even more did he desire their obedience. Our relationship with God is then defined as one of submission to his will.[123]

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[122] Primavesi, 209-210.
[123] Primavesi, 210.

Human suffering, then, is human fault. Because of the disobedience of these prototypical people, the inclination to disobey and its painful consequences are now part of human nature. The only hope says Primavesi, turning away from the Genesis stories themselves and entering into Christian doctrine, is for humans to acknowledge their sinfulness, and maybe God will allow them back into paradise at their deaths.[124]

This dominant interpretation of the Genesis creation stories, though here presented in stereotype, had its origin in the writings of Augustine. He in turn was influenced by attitudes from Greek culture, the Roman Empire, and the Hebrew patriarchal worldview that was absorbed into Christianity very early, even in some of the later books of the New Testament such as 1 Timothy. Early in the church, the connection between Eve and the serpent with sexuality and sin was taken for granted:

> By the early centuries of the Christian era, instances of such attitudes towards Eve were commonplace in religious literature. The association of Eve and sin with temptation, sexuality and lust is expanded in both Christian and Jewish post-biblical sources, with the serpent playing an increasingly satanic and phallic role.[125]

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[124] Primavesi, 212.
[125] Primavesi, 212.

Augustine was particularly influenced by Jerome's mistranslation of Genesis 3:16 in the Vulgate, which states that "you [Eve] will be under the power of your husband."[126]

Jerome's influences include Cyprian of Carthage and Ambrose, and their negative views of the body and sexuality:

> For Ambrose, human sexual feeling stood out in dark silhouette against the blaze of Christ's untouched body. The transformation from one into the other was brought about by conversion and baptism in the Catholic Church. Through this, human bodies "scarred" by sexuality, could be redeemed by a body whose virgin birth had been exempt from sexual desire.[127]

Eve, associated with sin and sexuality, becomes doubly evil when sexuality itself is perceived as sinful: "And of course the more Eve is identified as the source of sin, the more urgent becomes the need to control, subdue and dominate her."[128]

Not only, according to the traditional interpretation, did Eve introduce sin into the human race, but she introduced death as well which, Augustine said, God did not originally intend. This premise, accepted by Augustine, was first proposed by Ben Sira in the apocryphal book of Ecclesiasticus:

> There is an apparent allusion to [Eve] when the author, Ben Sira, says: "From a woman was the beginning of sin, and because of her we all died" (Eccl. 24:25). In associating the origins of sin with a woman, Ben Sira was in a minority. . . . Nevertheless, as the first known author to state that sin and death are the negative results of a woman's act, this early

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[126] As it appears in Primavesi, 212. Contrast the NRSV: "Your desire shall be for your husband."

[127] Primavesi, 213.

[128] Primavesi, 212.

> sage provided one of the most extraordinarily tenacious interpretations of the Genesis narrative.[129]

Ben Sira may have been in a minority when he first proposed that Eve was responsible for introducing sin and death to the world, but over time his statement became highly influential:

> Yet the connection between sin, death and woman has been so accepted into Christian consciousness that is has been assumed that God did not want her to eat (sin), neither did God want her to die. It was her own fault that she did both. This leads to the further assumption that God never intended us to die either.[130]

This controversial statement about the origin of sin and death was to become an accepted premise by Augustine and Christian orthodox theology.

The critique of the Augustinian interpretation of Genesis leans heavily upon the writings of a little-known contemporary of Augustine, Julian of Eclanum. Julian (like Primavesi) criticized Augustine for failure to pay sufficient attention to the text of the Genesis creation stories itself. Death, said Julian, was not the result of sin but of nature. The story says that Adam will return to the dust because he came from the dust, not because of sin. Furthermore, human fertility was created and blessed before the so-called expulsion from the garden. This implies the possibility of death even before Eve took the fruit from the tree:

> In the normal course of events, human beings were to replenish the earth depleted by mortality. The command to increase and fill the earth

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[129] Primavesi, 224.
[130] Primavesi, 226.

> supposes that there will be room for that increase, and if everyone were to survive then the earth would not be filled but choked.[131]

Death, then, according to Julian, was something God intended from the beginning, and not a punishment for sin. This, says Primavesi, is an important lesson for today, when the modern world struggles with its attitudes towards death and the earth suffers from the complications of overpopulation.

Julian also disagreed with Augustine's negative views on sexuality. This, Primavesi notes, may have something to do with these two persons' sexual experiences:

> Julian held that sexual desire is innocent, divinely blessed, and, once satisfied, entirely finite. It offers us the opportunity to exercise our capacity for moral choice. (He himself was happily married.) Augustine concludes that we are as helpless in the face of death as we are defenseless against sexual passion, because we are punished for sin. (He became a celibate after an illicit and guilt-provoking experience of sexual pleasure.)[132]

In contrast to Augustine, Julian insisted that neither death nor sexuality were a perversion of humanity's state, but a natural part of human existence from the beginning.

Following Julian's "just what the text says" approach, Primavesi makes further challenges to the traditional interpretation of the Genesis creation stories. For example, she asks, if the Genesis creations stories are primarily about sin, then why do none of the Hebrew words for sin or transgression appear in

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[131] Primavesi, 227.
[132] Primavesi, 227-228.

Genesis 1 to 3? Furthermore, the Hebrew Bible never makes the connection that Augustine and later Christian theology do, between people's sinfulness and the actions of Adam and Eve:

> Even the prophets, continually haranguing the Israelites about their sinful behaviour, never mention the couple. In their evident concern about sin, judgment, punishment, and banishment, the prophets threw the book at erring kings and idolatrous peoples – with the notable exception of these first three chapters.[133]

Neither the Genesis creation stories themselves, nor other texts later in the Hebrew Bible, say anything to indicate that the story of Adam and Eve was about sin. Even the story of Cain and Abel does not link Cain's sin with the actions of his parents.

The Cain and Abel story provides further insight into the previous chapters. It is here in Genesis 4 that the word "sin" appears for the first time:

> There God warns Cain before he kills Abel that "sin is crouching at the door". The masculine Hebrew noun (*hatta'th*) used for "sin" is said by one scholar to represent a demonic being, and the image conveyed is of Cain's attention being drawn to this figure waiting for him to make a choice: a choice between doing the right thing or not, a choice which will either deliver him from sin or into its grasp.[134]

Not only does God warn Cain that he has a choice, God also tells him why killing is the wrong choice: because it is not good.

In contrast, God gives Adam and Eve very little information about their choice. God tells them that if they eat from the tree of knowledge they will die.

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[133] Primavesi, 222.
[134] Primavesi, 223.

The serpent tells them that the fruit will make them like God and give them knowledge. No one tells them whether death is bad or knowledge is good; and they cannot be expected to know this for themselves, because they have not yet eaten from the tree that gives them the knowledge of good and evil:

> God has told them, as the woman reminds the serpent, that if they do eat, they will die. They are not told this in terms of whether or not it is good to eat, or bad to die: they are simply told what will happen. The woman sees that the fruit is good to eat "to get insight from", and takes it and eats. She gives it to the man, and he does the same. Then their eyes are open.[135]

The story of Adam and Eve, then, cannot be about sin, because the couple did not possess the knowledge they needed to make a knowingly moral or immoral (sinful) decision.

If the Genesis creation stories are not about sin, then what are they about? Looking at the context in which the stories were probably written, Primavesi concludes that they are about food. She sees this indicated in Genesis 2:5, which names the two items necessary for human life: rain, and human labour. She also notes that, in English translations, the repetition of words for eating and food in Hebrew is lost:

> The Hebrew root word in question here is *'kl*, "to eat". It recurs in one form or another more frequently than any other word in these two chapters [Gen. 2 and 3] except *'adam*. Its appearance at key places in the narrative draws attention to pivotal features of the action. . . . The striking repetition and placement carry their own message: the beginning of human existence coincides with a search for sustenance.[136]

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[135] Primavesi, 225.
[136] Primavesi, 241.

The Genesis creation stories, then, are about a basic human question of existence: how to get food.

Two things, at least, are needed in order to produce food: adequate water and human labour to till the soil. In an area plagued by frequent drought, a third thing is needed: a large labour force, which could only be created through frequent childbirth:

> But extensive terracing required a huge output of human energy, a staggering investment of time and labour. . . . For women, the increased labour needs had a double aspect. More work meant more women employed in the back-breaking labour of building and repairing walls, etc. In addition, increased labour needs required a larger work force, which in turn called for larger families. Responsibility for meeting the extraordinary labour requirements of highland dry farming rested ultimately on the shoulders of women.[137]

What are usually thought of as the punishments of Genesis 3, then, are in fact merely descriptions of the conditions of the society in which the story was written: hard labour tilling the soil for men (and women, as Primavesi notes), and frequent childbirth for women.

Having established this basic meaning of the Genesis creation stories, Primavesi adds her list of "uncommon perceptions," based once again on her "just what the text says" approach. The man, like the woman, is from the earth. His command from God is to serve the earth, and at his death he will return to

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[137] Primavesi, 242.

the earth. His sexuality is part of his relationship to the woman. He shares the planet with the other creatures.

The woman is not inferior to man in her behaviour. She speaks to the serpent on behalf of them both, then judges for herself and takes initiative. She receives knowledge and shares it. The consequence of their eating is that they become like God except in God's immortality.[138] In Genesis 1, male and female are created like God; in Genesis 2 and 3, God's likeness is won for humanity by the woman. The woman exhibits self-awareness, judgement, discretion, maturity, and independence. Her fertility is sustained by the products of the man's work and an interaction with the earth's fertility.

The serpent is a representative of the animal world and a symbol of wisdom offered to humanity in interaction with that world. It exposes the problems of keeping rules of conduct, namely that humans, in order to be human, must resist rules of helplessness that foster dependence on hierarchical structures.

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[138] Primavesi's statement that the humans become like God except in God's immortality is certainly debatable. Additionally, the assumption that the human couple receives the knowledge of good and evil by eating the fruit from the tree is not entirely supported by the text. The only knowledge Genesis 3:7 specifically states that the humans receive is the knowledge that they are naked. Primavesi's statement, similar to a conclusion drawn by Simkins (see Chapter 3), seems to be based on, first, the assumption that what the serpent said was correct ("You will not die; for God knows that when you eat of it your eyes will be opened, and you will be like God, knowing good and evil." Genesis 3: 4-5) and God's statement that "the man has become like one of us, knowing good and evil" (Genesis 3:22). For a good commentary on this subject, see Eugene Combs and Kenneth Post, The Foundations of Political Order in *Genesis* and the *Chandogyā Upaniṣad* (Queenston, Ontario: The Edwin Mellen Press, 1987), 162-163.

God is depicted as a benevolent yet tyrannical parent who provides comfort but demands obedience. He denies basic liberties to his "children." To secure obedience he resorts to threats (note that the human couple did not die, as God said they would, upon eating the fruit), to which the only natural reaction is rebellion. The doctrine of original sin was designed to keep God's goodness intact; this reading describes a God whom no human parent would want to emulate. This, Primavesi says, may have been the experience of God in early Israel:

> It is also a story of how we wrestle with the mystery of God, with the notion of the oneness of God. How do we live with a God who creates a world of harmony and happiness but leaves within the possibility of its destruction? How can we solve the mystery of God's nature? Is it good or bad, or both at once? . . . Taken in this way, the story gives expression to an inclusive monotheism that embraces and mirrors the diversity of experience of God in a particular time and place.[139]

The ambivalent picture of God that Primavesi sees in the Genesis creation stories is, she says, a reflection of the ambivalent feelings that the society that created this story must have had towards God – a God who, at times, provided beauty and plentiful harvest and, at other times, required hard human labour for basic sustenance.[140]

Once one clears away the dominant interpretation of Genesis 1 to 3, says Primavesi, one may understand "the narrative as it existed in Israel before the

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[139] Primavesi, 238.

[140] The summary of Primavesi's "uncommon perceptions" is based on pp. 232-235.

emergence of the influential expositions of Jewish and Christian antiquity."[141] It also becomes easy to see how the dominant interpretation became dominant. The dominant interpretation, which is essentially a hierarchical interpretation, originated with Augustine, who lived in a world of hierarchies:

> It is, therefore, important to realize that Augustine's interpretation of the Genesis account of creation, which was to become the standard one, arose within the context of conventional hierarchical Roman society, where Emperors commanded their subjects to live or die in a particular matter. Landowners controlled peasants by flogging and worked their lands by the sweated labour of those peasants. Male heads of households had absolute authority over wives, children and slaves.[142]

The hierarchical interpretation received further support from Constantine and the introduction of "battle imagery" into the Christian theological language. Augustine's interpretation received new life through the writings of Luther, who lived in a society similar in many ways to Augustine's, "when Emperors and Electors controlled armies, fathers had absolute authority in households, husbands absolute control in marriage."[143]

The teachings of these great "masters" became the basis of study for church leaders, and so their influence remains to this day.[144] Furthermore, Primavesi adds, most people in modern Western society do not work the soil for their food, and so the original meaning of the story is lost on them: "We no

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[141] Primavesi, 239.
[142] Primavesi, 214.
[143] Primavesi, 215.
[144] Primavesi, 231.

longer work in order to eat in order to live. Food is only an item in the family budget, often a relatively small one."[145]

In all these cases, the social world defined the understanding of God. The explanation of Adam and Eve's suffering was also the explanation of the suffering of people in Augustine's and Luther's respective societies. Though this was a "particular and magnificent attempt to express the ultimate reality of God in ways which were intelligible to their contemporaries,"[146] says Primavesi, such interpretations "had their day."[147] It is the duty of the theologian to provide a new interpretation for a different context.

The strength of Primavesi's work is her refusal simply to dismiss the biblical text. Sallie McFague, for example, sees all images of God from the past, including those in the Bible, as irrelevant metaphors from a bygone context, and therefore seeks to replace them with newer, more relevant ones.[148] Primavesi, on the other hand, delves boldly into her exegesis of the Genesis creation stories. Furthermore, she attempts to get behind the dominant interpretation that has been imposed on the Genesis text to the meaning originally intended by

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[145] Primavesi, 243.
[146] Primavesi, 230.
[147] Primavesi, 195.
[148] "No matter how ancient a metaphorical tradition may be and regardless of its credentials in Scripture, liturgy, and creedal statements, it still must be discarded if it threatens the continuation of life itself." McFague, 68-69. The dominant metaphor used in Christianity (which she calls the monarchical model) is inappropriate, in fact dangerous, to the context, and therefore it must be discarded or, more accurately, replaced.

its author. In this way, Primavesi's interpretation could be said to be more traditional (i.e., historical) than the traditional interpretation.

Primavesi's weakness is that she does not admit that her interpretation is an interpretation. She does suggest that past interpretations have been products of their own contexts and that it is time for a new interpretation, but overall the impression with which the reader is left is that her interpretation is the correct and original one. Contrast this with McFague's approach, in which she says that no one interpretation is better than another, even though some work better in certain contexts than others.[149]

The fact that Primavesi's interpretation is just that – her interpretation – becomes most clear when she discovers her own methodology in the Genesis creation stories:

> The central problem then, and now, is the creation and maintenance of structures and powercentres, whether in the city or in the country, which are bound to block all effective forms of loving our fellow earth-creatures either in public, in our church practices, or in our homes. By and large, these structures prevent the recognition and growth of diversity, and foster an us-versus-them categorizing tendency that remains the very essence of sin.[150]

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[149] The new metaphors McFague creates are not intended to replace the monarchical model as the sole possible models for God's relationship to the world. Rather, they are intended as tentative and temporary statements for the context in which McFague is writing: "They certainly cannot claim to be better absolutely, or from all perspectives, or for all time. At the most, they might be better relatively (to other constructions) from a particular perspective, and for a particular time. And this is the claim I would make: that a construction of the Christian faith in the context of a holistic vision and the nuclear threat is from out particular perspective and for our particular time relatively better than constructions that ignore these issues." McFague, 26-27.

[150] Primavesi, 234.

In other words, in applying a method of interpretation to the Genesis creation stories (or, in this case, to the story of Cain and Abel) that seeks to break down hierarchical thinking, Primavesi discovers that Genesis tells us we should break down hierarchical thinking. She conveniently finds a justification for her own methodology in the text she is studying, which suggests that she is reading her own preconceptions into the text rather than simply reading "just what the text says." That being said, her "just what the text says" approach is otherwise solid and convincing.

A further critique of Primavesi's work involves the image of God that she develops. The character of God that she pulls from the Genesis creation stories is a decidedly unpleasant deity:

> [God] is imaged here as a parent no human father or mother would want to adopt as a role model. He uses a classical "double-bind" method – a combination of favours and threats, sticks and carrots – in order to tie his offspring to him. He even lies to bind them to him.[151]

> If God is the creator of the world, and the world contains pain, ambiguity and evil, then these must have their origins in God at the same time that God urges us to choose life and justice.[152]

Harold Kushner, writing eight years earlier, comments on this kind of understanding of God:

> The problem with such an answer is that it tries to promote justice and kindness and at the same time tries to celebrate God for being so great

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[151] Primavesi, 234.
[152] Primavesi, 239.

that He is beyond the limitations of justice and fairness.[153]

Primavesi is very concerned in her book with theology and faith. How does one have faith in a God that demands justice with words but does not lead by example?

Two comments, however, may be made in Primavesi's defense. The first, as she notes, is that the traditional image of God is no less unpleasant than her own:

> [In the traditional interpretation] the real mystery of God's relationship with sin and suffering in the world, God's transcendence *and* God's total involvement in the good and the bad of human and natural existence is narrowed down to a vision of a Father God working out the best way to redeem mankind from one trivial human act, and being prepared to use his own Son as an instrument towards that end.[154]

If Primavesi's understanding of God is uncomfortable to the ear of faith, the full implications of the traditional understanding are no less problematic.

Second, in defense of Primavesi's portrayal of God, she indicates, though she does not states as clearly as might be desired, that the picture of God in Genesis is not intended as an objective description of God but only one culture's understanding and experience of God:

> What if we assume instead that this story, like all the others in the Bible, arose in the context of a particular society in which the actions of certain individuals or groups in the story are consistent with the rules and values operative in that society? . . . What if we do not read it as a story of

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[153] Harold S. Kushner, When Bad Things Happen to Good People (New York: Avon Books, 1983), 41.

[154] Primavesi, 252.

> origins, but as a superlatively imaginative account of a particular group's faith in God?[155]

The picture of God in the Genesis creation stories, then, is not intended to be the authoritative definition of what God is like, but merely one culture's expression of their experience of God. A culture that constantly struggled with the difficulties of procuring sustenance was likely to have ambivalent feelings about God – feelings that are reflected in the ambivalent picture of God in the story.

Overall, From Apocalypse to Genesis is an excellent and mature contribution to the Genesis and ecology debate. Its in-depth exegesis is admirable. Primavesi, more than any of the authors who preceded her, succeeds in producing an interpretation of the Genesis text based solely on what the text says without introducing words or concepts that are not already present in the stories. Combined with her historical, anthropological, and sociological insights, Primavesi's study provides a convincing, solid explanation of the original meaning of Genesis story, its subsequent misinterpretations, and the dangers caused by those traditional understandings.

As with many of the theologians in this debate, Primavesi accepts the accusations leveled at Christianity by Lynn White and his ilk. She speaks of the Christian establishment's "failure to teach or show moral concern for the environment;"[156] she criticizes traditional Christianity for being "a closed system

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[155] Primavesi, 238.
[156] Primavesi, 1.

of human salvation" and notes that the "religion of the native American Indians, of Jainism, Buddhism, Druidism or the Goddess are taken by many baptized Christians as more helpful pathways to living in harmony with the natural world."[157] She critiques "limiting aspects of a narrow Christian tradition which stem from a particular reading of the Genesis text."[158] Nevertheless, she is not moved to dismiss almost all of Christianity, as White does, or the Genesis creation stories entirely, as McFague does. She defends Genesis by looking through the veil of the traditional interpretation at its original context, and in the process she defends Christianity. Once again, the Genesis and ecology debate is revealed as a debate about the Christian faith.

4.6 Summary

All of the contributions of theologians to the Genesis and ecology debate have this in common: they are all unapologetically apologetics. All of the works studied in this chapter are intended as defenses of the Christian faith.[159] They

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[157] Primavesi, 23.

[158] Primavesi, 63.

[159] McFague's Models of God makes this point as well. Because of its very lack of concrete biblical exegesis, McFague makes obvious what has only been hinted at all along: the Genesis and ecology debate is not about the interpretation of certain texts in Genesis. What the debate is really about is Christianity, or to what extent Christianity should bear the "burden of guilt." Is Christianity relevant to a world in which its complicity in the human depletion of the environment is taken for granted by many? Or more to the point, can Christianity be part of the solution to the ecological problem? Up to the time of McFague's writing, every author who defended the Genesis creation stories was defending Christianity; every author who rejected the Genesis creation stories was rejecting Christianity. Perhaps what makes McFague's contribution

are defending Christianity against the accusations made by Lynn White and his supporters that Christian theology is the basis of the modern ecological crisis. Santmire quotes directly from White; the others allude to the popularized form of his thesis.

Ironically, all of the theologians defend Christianity against White's thesis while, at the same time, accepting to a certain degree the "burden of guilt" that White puts on Christianity. They do this by pointing to theologies of the past that were used to justify human exploitation of the natural world, while suggesting alternative theologies that can be more environmentally-friendly. Moltmann (and McFague) see themselves as creating an entirely new understanding of God's relationship to the world. Santmire, Hall, and Primavesi attempt to discover an ecological motif in the past, whether a minority theme in historical theology (Santmire in Travail of Nature), or the original meaning of the biblical text before later interpretations were imposed upon it (Hall, Primavesi).

The focus of the apologetic work concerns, for the most part of each theologian's work, the Genesis creation stories, drawing on the insights of the biblical scholars who entered into the debate before them. Not to do so would be foolish; when Lynn White initiated the debate, the battleground was firmly established in the first chapters of the first book of the Bible. For the most part,

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unique is that it rejects the Genesis creation stories while at the same time affirming Christianity, albeit a highly modified Christianity, as a potentially powerful force in reversing the damage humanity has done to the planet Earth. See footnote 111 in this chapter.

a defense of the Genesis creation story is a defense of Christianity. Santmire (in Brother Earth), Moltmann, Hall, and Primavesi all attempt to demonstrate that Genesis 1 to 3 have been interpreted in such a way as to justify human mastery over the earth while ignoring what the text actually says (Primavesi) or the context of the Hebrew Bible or entire Christian Bible in which these chapters are located. For these authors, the authentic and original meaning of the Genesis texts is one that does not support unlimited human mastery and in fact opens the way to an ecological theology.

All of the authors studied in this chapter have also this in common: they believe that Christian theology can be adapted to speak to the ecological crisis of today. This adaptation may require the discarding of old metaphors or interpretations. Obviously this opinion is coloured by the fact that these authors are all, by profession, theologians. To deny the possibility of Christian theology's relevance to the current context would be not only to invalidate the Christian faith but their own occupations as well.

A third similar theme runs throughout all of these contributions to the Genesis and ecology debate: the Genesis creation stories (and thus Christian theology which, at this point in the debate, is inseparable) bear some relevance on the ecological condition of today's world. The connection, however, is not explicitly spelled out by any of the theologians. Certainly any talk of Genesis directly creating the attitudes that led to the current crisis (as in Lynn White's

landmark article) is absent. Santmire in his later work, Hall, and Primavesi all indicate that the dominant historical interpretation of Genesis supports modern attitudes of mastery and exploitation. But which is the chicken and which is the egg? Was there first a desire to master and dominate the natural world, and then an attempt to justify that desire through biblical interpretation (as was Wybrow's thesis, studied in the previous chapter)? Or was Genesis interpreted in a certain way and this, in turn, gave rise to attitudes of exploitation and dominance? Though the question is not dealt with directly in any of the authors studied, it should be safe to assume that they sympathize with the former suggestion. Primavesi, for example, demonstrates that the dominant interpretation of Genesis, which originated with Augustine and was later reinforced by Luther, was reflective of the respective societies in which they lived. The society created the interpretation of Genesis, and not vice versa.

In Moltmann, the connection between Genesis and the ecological crisis is somewhat different. He implies, though never states, that Genesis could not have given rise to modern practices of technological exploitation of the earth because of the separation of religion from science until very recent years. Because these two realms of thought insisted that they were not talking about the same thing (i.e., religion denied that its doctrine of creation was about the factual origins of the universe), then religion could not have influenced scientific thought and the rise of exploitative technology. The contribution of Christian

theology to the ecological crisis, Moltmann says, is that it encourages passivity, because human action towards the improvement of the conditions of the world is futile between the beginning and end times.

Theologians know that any discussion of the Christian Bible has implications for Christian theology and Christianity in general. All of the contributors to the Genesis and ecology debate knew this, in fact; it was the theologians who made the point most clearly.

Chapter 5
Conclusion and Summary

The purpose of this thesis has been to provide a critique of representative authors in the Genesis and ecology debate; to demonstrate the influence of Lynn White's 1967 article, "The Historical Roots of our Ecologic Crisis,"[1] on Christianity's understanding of ecological matters; and to reveal that the Genesis and ecology debate, from beginning to end, was not merely about the interpretation of certain biblical texts, but about Christianity and its relevance to the current ecological situation.

In 1992, United Church of Canada ecological theologian David Hallman[2] wrote that the Bible has the potential to provide people of faith with the basis for a belief system that includes within it respect for the earth and its creatures:

> Christians who are deeply concerned about the destruction of the Earth are finding promising insights in the Bible and are rediscovering God's love for the whole of Creation. God's Spirit is leading people to understand the human interrelatedness with all of nature. These ideas are intellectually and spiritually powerful. They can help reorient the relationship of our societies to the Earth.[3]

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[1] Lynn White, Jr., "The Historical Roots of our Ecologic Crisis." Science 155 (10 Mar. 1967): 1203-1207.

[2] Hallman, in his 2000 publication, mentions that he has "worked on ecological issues for the United Church of Canada for almost 25 years." The fact that his position (staff person responsible for energy and environmental issues) exists in a mainline Christian denomination can be attributed, in part, to the influence of Lynn White and the ecological awareness he inspired in Christian theology. David G. Hallman, Spiritual Values for Earth Community (Geneva: WCC Publications, 2000), vii.

[3] David G. Hallman, A Place In Creation: Ecological Visions in Science, Religion, and Economics (Toronto: The United Church Publishing House, 1992), 64.

Like many religious scholars concerned with ecological matters, though, Hallman knows that biblically-based Christian theology has not always been used in an environmentally-friendly way:

> Traditional Christian theological doctrines have been major contributors to Western societies' view of nature as separate from humans. The distinction between nature and humanity has proven useful for economic development since the Industrial Revolution and has sanctioned the exploitation of the Earth's resources for human progress without regard for the consequences.[4]

Though people of faith today can find resources for an ecological theology in the Bible, theologians of the past have used the Bible to justify exploitation and destruction of the natural world.

As Hallman begins a study of how, historically, theology has helped humanity to think of itself as separate from the rest of creation, he quotes the dominion mandate of Genesis 1:26, commenting, "That would seem pretty much to say it all." To provide a little more explanation, he points to the influence of Lynn White:

> Writing in the early years of the awakening environmental movement, White argues that Judeo-Christian scripture and theology must accept much of the blame for the ecological crisis. The concept of dominion had sanctioned the destruction of the Earth's environment that had occurred in Western societies since the Industrial Revolution.[5]

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[4] Hallman, Place in Creation, 63.
[5] Hallman, Place in Creation, 65.

It was Lynn White who, in placing a "burden of guilt"[6] upon Christianity and its Bible for the ecological crisis, pointed out to the Christian churches the relationship between the way in which they had interpreted the "Genesis-dominion-mandate" and the modern environmental situation.

Here, within three pages of Hallman's book, are the three elements of the entire Genesis and ecology debate: 1) reference to Lynn White's foundational article; 2) a discussion of at least part of the Genesis stories, especially Genesis 1:26, and 3) a discussion of Christian theology.

All of the contributors to the Genesis and ecology debate wrote, at least in part, in response to Lynn White's "The Historical Roots of Our Ecologic Crisis." The earliest participants in the debate named him directly as the foe they were battling. For example Barr, writing in 1972, summarized White's article, noted that it had already been reprinted, excerpted, and influenced other writers, and then said, "All such arguments [like White's] are likely in the next decades to form a significant challenge to Jewish and Christian religion."[7] Later in the debate, when White's thesis became even more widespread, the Genesis and ecology debaters said they were writing not just in response to White, but to a body of authors who held similar views, such as Wybrow's "mastery writers."[8]

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[6] The phrase "burden of guilt" was the most quoted expression from White's article throughout the Genesis and ecology debate. White, 1206.

[7] James Barr, "Man and Nature – The Ecological Controversy and the Old Testament," John Rylands Library Bulletin 55 (1972), 17.

[8] Cameron Wybrow, The Bible, Baconianism, and Mastery over Nature: The Old Testament and its Modern Misreading (New York: Peter Lang, 1991). 3-4.

The responses to White were at first hostile. Gowan, for example, after summarizing White's main arguments said, "What is the Old Testament professor to do – cry *mea culpa?* I propose a defense, indeed a counterattack."[9] As the debate progressed, however, summaries of White's thesis were much more sympathetic, as with Hallman mentioned above, who acknowledged that, historically, the Genesis creation stories have been interpreted by Christian theologians exactly in the way that White described. Simkins, for example, writing in 1994, said that White's analysis of Genesis and theology is entirely understandable:

> If Lynn White misinterpreted the Bible's view of the relationship between humans and the natural world, as biblical scholars have held, he can be excused, for he simply echoed the dominant position of biblical scholarship at that time.[10]

So, though the opinions of White's study in the Genesis and ecology debate varied from hostility to sympathy, all of the contributors had this in common: their works began as responses to White's "Historical Roots," or other writings influenced by White's thesis.

The two other main elements of the Genesis and ecology debate – a discussion of the Genesis creation stories and a discussion of Christian theology – can appear in either order. The biblical scholars, particularly, began with

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[9] Donald E. Gowan, "Genesis and Ecology: Does 'Subdue' Mean 'Plunder'?" The Christian Century 87 (7 Oct. 1970), 1188.

[10] Ronald A. Simkins, Creator and Creation: Nature in the Worldview of Ancient Israel (Peabody, Massachusetts: Hendrickson Publishers, Inc., 1994), 7.

exegetical work and moved to the implications of their study on Christian theology. Gowan, for example, began with a critique of White's understanding of history and analysis of Genesis, then concluded, contradicting White, that the Bible provides solutions to (not causes of) the ecological crisis:

> For the Bible's teaching about the relationship of man and nature to God can teach us how to keep man not only alive, but fully and humanly alive.[11]

The theologians, on the other hand, commonly began with a discussion of Christian theology and moved from there into a discussion of Genesis. Hall, for example, began with a large chapter delineating "Christian culpability in a groaning creation," and then, in order to provide an alternate Christian understanding of humanity's relationship to the environment, turned to a study of the main themes of Genesis:

> My thesis, stated in the most rudimentary manner, is that the vocation of the human being within creation is to image God, and that the imaging of God (*Dominus*) described in the tradition of Jerusalem would mean exercising the dominion of stewardship.[12]

Having named the two key words of Genesis 1: 26-28 – image and dominion – Hall launched into a thorough exegesis of the Genesis creation stories. Studying the Genesis creation stories and discussing Christian theology are two main elements of the Genesis and ecology debate though, depending on the author, the study of Genesis may lead to a discussion of theology, or vice versa.

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[11] Gowan, 1191.

[12] Douglas John Hall, Imaging God: Dominion as Stewardship (New York: Friendship Press, 1986), 60.

Though Hallman hits on all of the major points of the Genesis and ecology debate – reference to Lynn White's foundational article, a discussion of at least part of the Genesis stories, and a discussion of Christian theology – he, like all of the authors in this study, does not obviously state the causal connection among them. The connection is this: Lynn White, in "The Historical Roots," drew Christianity's attention to the way in which its theology had been used to justify many of the attitudes that led to the ecological crisis. He did this through a brief study of the Genesis creation stories. As White's thesis became increasingly well-known and influential, theologians, biblical scholars, and even authors whose professional interests would normally be considered outside of the exegetical arena, responded to White by proposing alternative interpretations of the Genesis creation stories and, as a result, revolutionizing Christianity's understanding of ecological matters.

What began as a "burden of guilt" resulted in a "debt of gratitude." It was through the influence of White's foundational article that Christianity was forced into a reconsideration of its theology and its relevance to the ecological situation. Hallman himself notes the influence of White's article: "Rarely has an academic paper had such a profound impact and been so widely quoted and reproduced."[13] Similarly Simkins, noting that White's thesis merely echoed the writing of contemporary religious studies writers, said that White and his

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[13] Hallman, Place in Creation, 65.

supporters had created a new awareness of ecological matters for theologians: "How could a biblical interpretation that devalues nature, subordinating it to human concerns, contribute to the preservation of the environment?"[14]

Of course, it would be impossible to imagine what the current state of theology would be had it not been for Lynn White. Perhaps another author would have made the same challenge to Christianity that White did. Perhaps Christian theology would have begun, on its own impetus, to consider ecological issues, maybe based on a different biblical text. But as it is, Christianity has spent the last 35 years trying to understand what the Bible and its theology have to say about ecological matters. One of the results of this debate is that churches worldwide have declared the years 1999, 2000, and 2001 a celebration of the Great Jubilee, calling on churches and society generally to live out the principles of jubilee as found in the twenty-fifth chapter of Leviticus, including an ecological focus on "Renewal of the Earth."[15] Much of the discussion on Christianity's relationship to ecological matters, though, has been focused around the Genesis creation stories. And that, as this thesis has shown, is due entirely to the influence of Lynn White's 1967 "Historical Roots."

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[14] Simkins, 2.

[15] Canadian Ecumenical Jubilee Initiative, A New Beginning: A Call to Jubilee (Toronto: Canadian Ecumenical Jubilee Initiative, 1998), 10.

Appendix 1
The Contribution of a Poet

Daniel Quinn
Ishmael[1]

One final contribution to the Genesis and ecology debate is worth investigating, but this work does not fit easily into any of the scholarly categories studied in the main body of this thesis. The author, Daniel Quinn, is not what would normally be considered a scholarly writer — one of his reviewers calls him "a poet and freelance author."[2] The book, Ishmael, is a work of fiction – a novel. Furthermore, the word "Genesis" seldom appears in the text and, though much of the book is about the environmental crisis, Quinn's concern is more generally "to save the world."[3] Nevertheless, the imagery in Ishmael provides such an insightful interpretation of Genesis, as this investigation will show, that it would be foolish to ignore it altogether. Though it is a work of fiction, Ishmael fits easily into the purview of this thesis: it is a text, written by a non-Religious Studies author, who writes about both the creation stories in Genesis and the ecological crisis.

Because Ishmael is so dissimilar from the other works in this study, the approach to it will also have to be somewhat different. Quinn provides no

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[1] Daniel Quinn, Ishmael (Bantam / Turner Book: New York, 1993).

[2] Elizabeth Marshall Thomas, "Planet of the Ape," New York Times Book Review 97 (23 Feb. 1992), 15.

[3] Quinn, 4. Quinn received the "Turner Tomorrow Fellowship, a literary competition intended to foster works of fiction that present positive solutions to global problems." See Lawrence Rungren, Review of Ishmael by Daniel Quinn, Library Journal 116 (Dec. 1991), 198-99.

footnotes or bibliography, so it is impossible to guess with any certainty what his influences may have been. He studies Genesis through allusion rather than exegesis — he only mentions Genesis directly two or three times – yet he provides a commentary on the creation stories through imagery. This study, therefore, must be more of an interpretation than an analysis. Furthermore, for the purpose of this study, it will be assumed that Quinn's opinion of Genesis and the ecological crisis is identical with that of his main character, Ishmael.

At the beginning of the novel, the unnamed narrator responds, reluctantly, to a newspaper ad: "Teacher seeks pupil. Must have a earnest desire to save the world. Apply in person."[4] When the narrator proceeds to the address included with the ad, he is startled to discover that the teacher is a gorilla named Ishmael. Through the help of a wealthy Jewish businessman, Ishmael explains, he has become well educated and has awakened his ability to communicate telepathically. The narrator meets with Ishmael daily, and soon the reader is drawn into the lessons as a fellow student.

The narrator's first homework assignment is to provide Ishmael with his (the human's) society's creation story. The next day the narrator insists that his society has no creation story.[5] Ishmael asks him to tell him what he would say if he were to address an eighth-grade class on the topic of how everything that is

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[4]Quinn, 4.
[5]Quinn, 50.

came to exist.[6] The narrator then throws out a few facts, as if vaguely remembered from high school science lessons, about the big bang, the formation of the solar system, the cooling and solidifying of the planets, the formation of bacteria in the Earth's oceans, and the evolution of life from the oceans, to the land, to the primates, and concludes with the appearance of humanity.[7] This is not a story or a creation myth, the narrator insists, but a collection of scientific facts.[8] Ishmael replies that the ancient Romans or Greeks or Hebrews would not have recognized their societies' creation stories as myths either, because for them at that time they were simply accounts of what happened; "Naturally you wouldn't consider it a myth. No creation story is a myth to the people who tell it. It's just *the* story."[9]

Ishmael says that he does not deny that the theory of the big bang is based on science, observation, and logic. What is mythological about this creation story, he says, is the way in which it is told. He repeats the narrator's account of creation and says:

> "That's right. Creation didn't end with jellyfish. Still to come were the vertebrates and the amphibians and the reptiles and the mammals, and of course, finally, man."
> "Right."
> "And so your account of creation ends, 'And finally man appeared.'"
> "Yes."
> "Meaning what?"

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[6]Quinn, 50.
[7]Quinn, 51.
[8]Quinn, 52.
[9]Quinn, 50.

> "Meaning that there was no more to come. Meaning that creation had come to an end."
> "This is what it was all leading up to."
> "Yes."
> "Of course. Everyone in your culture knows this. The pinnacle was reached in man. Man is the climax of the whole cosmic drama of creation."
> "Yes."
> "When man finally appeared, creation came to an end, because its objective had been reached. There was nothing left to create."
> "That seems to be the unspoken assumption."[10]

Though Ishmael never debates the scientific facts in the narrator's account of creation ("Facts are facts, even when they're embodied in mythology."[11]), he insists that it is still a myth for this reason: it ends with the appearance of humanity.

Ishmael points out that there is no scientific evidence that would prove that the process of creation ended when humanity appeared:

> "Did even the planetary process of creation come to an end three million years ago with the appearance of man? Did evolution come to a screeching halt just because man had arrived?"
> "No, of course not."
> "Then why did you tell it that way?"
> "I guess I told it that way, because that's the way it's told."[12]

No matter how many scientific facts the narrator includes in his creation story, it still has a mythological character. Though the story presents itself as being scientific and unbiased and free from talk about gods and divine intentions, the story still comes equipped with a meaning: everything came into existence for a

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[10]Quinn, 57.
[11]Quinn, 57.
[12]Quinn, 58.

purpose – that being the appearance of humankind. The narrator finally admits defeat: "It's a myth. Incredibly enough, it's a myth."[13]

Ishmael subtly relates this lesson to the first creation story in Genesis. He says that the assumption that humanity is the final goal of creation is often not as "unspoken" as the narrator suggests:

> The religions of your culture aren't reticent about it. Man is the end product of creation. Man is the creature for whom all the rest was made: this world, this solar system, this galaxy, the universe itself.[14]

Here Quinn seems to be providing a subtle commentary on Genesis. Just as the narrator's story begins with the creation of the universe in the big bang, Genesis 1 begins with the creation of "the heavens and the earth" (Gen. 1:1). Having mentioned the heavens and the earth, the rest of Genesis 1 focuses mainly on the earth. Similarly, the narrator's story becomes more and more narrowly focused: the galaxy, the solar system, Earth, mammals, then humans. Both the narrator's story and Genesis end in the same way: the creation of humanity as the final act of creation, for whom everything else was made.

So far this interpretation of Ishmael would seem to indicate that Quinn's opinion about Genesis's relationship to the environmental crisis is similar to that of Lynn White. Genesis presents a certain attitude, in this case that everything was created for humanity, that is paralleled in the modern world. This attitude,

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[13]Quinn, 59.
[14]Quinn, 57.

influenced by the Genesis creation stories, is responsible for the environmental crisis:

> Exactly. That's what's been happening here for the past ten thousand years: You've been doing what you damn well please with the world. And of course you mean to go right on doing what you damn well please with it, because the whole damn thing *belongs to you.*[15]

Quinn also says, like White, that even people who do not consider Genesis a sacred text are still influenced by the attitudes towards the environment found in Genesis: "Everyone in your culture knows that, don't they? Even atheists who swear there is no god know that the world was made for man."[16] In this much, Quinn's contribution to the Genesis and ecology debate is similar to White's.

The connection Quinn posits between creation mythology and the ecological crisis, though, is not quite the same as White's. White says that Genesis created certain attitudes towards the environment, and that those attitudes resulted in the crisis. Quinn, on the other hand, says that the attitudes created the story, and that the story created the crisis. According to Ishmael, every culture has a story that it believes and attempts to make come true. He cites, as an example, Nazi Germany. Following World War One, Hitler provided the German people with a story:

> A story in which the Aryan race and the people of Germany in particular had been deprived of their rightful place in the world, bound, spat upon, raped, and ground into the dirt under the heels of mongrel races, Communists, and Jews. A story in which, under the leadership of Adolf

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[15]Quinn, 61-62.
[16]Quinn, 61.

> Hitler, the Aryan race would burst its bonds, wreak vengeance on its oppressors, purify mankind of its defilements, and assume its rightful place as the master of all races.[17]

Because of the suffering and devastation that Germany experienced after World War One, Ishmael says, the German people accepted and chose to believe Hitler's story. Furthermore, the story was reinforced through propaganda and systems of education. The history of the Nazi party may be seen as an attempt to enact[18] the story Hitler told, to make the story come true.[19] The story itself did not cause the destruction that the Nazis brought about. A certain attitude brought the story into existence, and the enacting of the story created the destruction.

In parallel, then, the connection between Genesis and the ecological crisis, according to Quinn, is that a certain attitude (that the world belongs to humanity) caused the story of Genesis to come into existence, and the attempt to enact the story resulted in the ecological crisis. Just as Hitler's story was reinforced by systems of education, the Genesis story too was reinforced by institutions. Perhaps there is a hint of blame on the churches here, but for Quinn the message is repeated in every available medium. The narrator admits to the ubiquity of the idea that everything belongs to humanity:

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[17]Quinn, 34.

[18]Ishmael provides a definition of "enact" at the same time as he defines "story": "To enact a story is to live so as to make the story a reality. In other words, to enact a story is to strive to make it come true. You recognize that this is what the people of Germany were doing under Hitler." Quinn, 40-41.

[19]Quinn, 35.

> Actually, that's pretty amazing. I mean, you hear it fifty times a day. People talk about *our* environment, *our* seas, *our* solar system. I've even heard people talk about *our wildlife.*[20]

The connection between Genesis and the ecological crisis, then, according to Quinn, is: a certain attitude caused a certain story to be created; this story was reinforced through the help of certain institutions; the story became embedded in the culture; and the reinforced attitudes led to the environmental crisis. This is Quinn's analysis of the first creation story. His approach to the second is somewhat different.

Ishmael divides all living things into two categories: the Takers and the Leavers.[21] The Takers are most of humanity, particularly modern western culture and all cultures that have been influenced by western thought and beliefs. The Leavers, in contrast, are all of the non-human species and those few human cultures that have not adopted western ways. These definitions are never clearly laid out, but rather evolve throughout the dialogue between Ishmael and the narrator. Ishmael simply says that the terms Taker and Leaver are meant to correspond with the more common expressions, civilized and primitive cultures, but without the positive and negative connotations, or with "your [the narrator's] culture" and "all other cultures."[22] The Takers are the culture that created the story with the premise that all that exists belongs to

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[20]Quinn, 62.
[21]Quinn, 38.
[22]Quinn, 39.

humanity, and they are the ones who have enacted it. The Leavers, on the other hand, tell and enact quite a different story. Their story, says Quinn, is very much like Genesis's second account of creation.

Quinn backs up his claim that the second creation story in Genesis is a Leaver story with anthropological evidence. Ishmael points to the beginning of the agricultural revolution as the foundation of Taker society. Furthermore, he notes that the agricultural revolution never ended, but continues to be the foundation of new Taker societies:

> It didn't end. It just spread. It's been spreading ever since it began back there ten thousand years ago. It spread across this continent during the eighteenth and nineteenth centuries. It's still spreading across parts of New Zealand and Africa and South America today.[23]

Ishmael adds two important observations about the agricultural revolution. First he points out that the first Takers were not the first or only agriculturists. What made them unique was their belief that agriculture was the only correct way of living:

> They've always believed that, like the gods, they know what is right to do and what is wrong to do, and what they're doing is *right*. . . . They've demonstrated it by forcing everyone in the world to do what *they* do, to live they way *they* live. Everyone had to be forced to live like the Takers, because the Takers had the one *right* way.[24]

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[23]Quinn, 153.
[24]Quinn, 166.

The first Takers were not the only agriculturists,[25] but what made them unique, what made them Takers rather than Leavers, was that they insisted that they were right.

Ishmael's second important observation is that, when the agricultural revolution began in the Fertile Crescent around 8000 B.C.E., it did not happen in a vacuum — the first Takers, as Ishmael calls them, were surrounded by many different Leaver cultures.[26] Because of their insistence on their correctness, the Takers soon began to expand, through assimilation or conquest. As their agriculture began to expand outside of the Fertile Crescent, the Takers started to come up against and push back their neighbours. Among their neighbours would have been hunter-gatherers and herders, such as the Semites, who needed much land in order to support their way of living. The Semites, and their way of life, were devastated by the expansion of the agriculturists.[27] This, the narrator notices, is exactly what takes place in the biblical story of Cain and Abel – the murder of the pastoralist by the farmer:

> "What was happening along that border was that Cain was killing Abel. The tillers of the soil were watering their fields with the blood of Semitic herders."
> "Of course. What was happening there was what has always happened along the borders of Taker expansion: The Leavers were being killed off so that more land could be put under cultivation. . . Here at the border

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[25]Quinn, 167-68.
[26]Quinn, 170.
[27]Quinn, 172.

> that separates tillers of the soil from Semitic herders, Cain and Abel confront each other."[28]

The story of Cain and Abel, according to Quinn, then, is a story about a confrontation between the agriculturist Takers and the pastoralist Leavers. The story clearly indicates who won: Cain the tiller kills Abel the herder.

Not only is the Cain and Abel story a story about the Takers' defeat of the Leavers, says Ishmael, but the story only makes sense if it was told from the Leavers' point of view:

> I know it's always been a mystery as to why God accepted Abel and his offering and rejected Cain and his offering. This explains it. With this story, the Semites were telling their children, 'God is on our side. He loves us herders but hates those murderous tillers of the soil from the north.'[29]

The story of Cain and Abel, then, is a Leaver story — a story about their own defeat.

Just as the story of Cain and Abel is a Leaver story, so is the second creation story in Genesis. Ishmael asks his student to imagine what the Takers would have looked like to the Leavers as they began invading their territory:

> Here's what it would look to the Semites, I think. 'What's going on here is something wholly new. These aren't raiding parties. These people aren't drawing a line and baring their teeth at us to make sure we know they're there. . . . Something really weird must have happened to turn these people into murderers. What could it have been? . . . They're saying, "What we want to live lives and what we want to die dies." That's it! They're acting as if they were the gods themselves. They're acting as if they eat at the gods' own tree of wisdom, as though they were as wise as

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[28]Quinn, 173.
[29]Quinn, 173.

> the gods and could send life and death wherever they please. . . . These people found the gods' own tree of wisdom and stole some of its fruit. . . .'[30]

According to Quinn's interpretation, then, only the gods have the wisdom to decide what must live and what must die. When the Takers started making these decisions themselves, they were acting as if they had the knowledge of the gods.

This is why, in the second Genesis creation story, the knowledge of good and evil was forbidden: the Leavers saw the evil that would arise if humans started acting like gods. If the story had been written by a Taker culture, the knowledge of good and evil would never have been portrayed as a curse:

> If it had been written from the Taker point of view, the knowledge of good and evil wouldn't have been forbidden to Adam, it would have been *thrust* upon him. The gods would have hung around saying, 'Come on, Man, can't you see that you're nothing without this knowledge? Stop living off our bounty like a lion or a wombat. Here, have some of this fruit and you'll instantly realize that you're naked — as naked as any lion or wombat: naked to the world, powerless.[31]

If the second creation story had been told by the Takers, their newfound knowledge of agriculture would have been portrayed as a blessing. Since the knowledge is seen as a curse that has been inflicted upon the Takers, Quinn is saying, the story must have been written by the Leavers.

Ishmael retells the second creation story with a few embellishments. Specifically, he recounts a conversation among the gods that leads to the

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[30]Quinn, 176-77.
[31]Quinn, 166.

decision to forbid the human to eat from the tree of knowledge. The tree of knowledge, according to Ishmael's story, provides the gods with the wisdom they need to decide what must die and what must live.[32] One day the lion goes hungry and the deer goes free; another day the lion feeds but the deer dies. The gods can assure the animals that this is right, because they have eaten the fruit from the tree of knowledge: "This is indeed the proper knowledge of the gods: *the knowledge of who shall die and who shall live.*"[33]

The gods then consider Adam and, realizing his god-like potential, wonder what would happen to him if he ate the fruit from the tree of knowledge. Obviously, they decide, Adam would not gain the knowledge of good and evil, for "the fruit of this tree nourishes only the gods."[34] What if he did eat from the tree of knowledge, though, and thought that he gained the knowledge of the gods? The result could only be disaster:

> If Adam should eat of our tree . . . there's no telling how he might deceive himself. Not knowing the truth, he might say to himself, 'Whatever I can justify doing is good and whatever I cannot justify doing is evil. . . . Believing himself our equal, he would be capable of anything. . . . If this should happen . . . Adam would devour the world in a single day, and at the end of that day he would devour himself.[35]

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[32]Quinn, 158-9.
[33]Quinn, 159-60.
[34]Quinn, 161.
[35]Quinn, 162-63.

The gods foresee the disasters that would occur if the man thought he had the wisdom of the gods, and so they forbid him to eat the fruit of the tree of knowledge:

> And when the gods heard all this, they saw that, of all the trees in the garden, only the Tree of the Knowledge of Good and Evil could destroy Adam. And so they said to him, "You may eat of every tree in the garden save the Tree of the Knowledge of Good and Evil, for on the day you eat of that tree you will certainly die.[36]

Though the story that Quinn tells, through Ishmael, is quite different from the second creation story in Genesis, the parallel story provides an insightful commentary on Genesis. The tree of knowledge only gives wisdom to the gods. Knowing that Adam may think he can gain the gods' knowledge, the gods forbid him to eat from the tree of knowledge. Only a Leaver culture could have written this story, because they were the victims of the Takers' illusions of godhood.

What happened to the second story of creation, says Ishmael, was "an event of exquisite irony" — the Hebrews adopted the story as their own.[37] What is ironic about this event is that the Hebrews were always a Taker culture:

> Among the people known as the Hebrews, this was already an ancient story — and a mysterious story. The Hebrews stepped into history as Takers — and wanted nothing more than to be like their Taker neighbours.[38]

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[36]Quinn, 164.
[37]Quinn, 154.
[38]Quinn, 169.

The reason the second creation story was "mysterious" to the Hebrews is that the Hebrews were Takers and the story was a Leaver story. Indeed this is the reason the story has never been fully understood since it was canonized:

> It survived because the Takers never managed to overrun the Semites, and the Semites refused to take up the agricultural life. Even their eventual Taker descendants, the Hebrews, who preserved the story without fully understanding it, couldn't work up any enthusiasm for the peasant life-style. And this is how it happened that, with the spread of Christianity and of the Old Testament, the Takers came to adopt as their own a story an enemy once told to denounce them.[39]

The second story of creation was adopted by the Hebrews and, eventually, by Christians, but no one after the Semites fully understood it. They could not have understood it because they were enacting a different story — the one told in the first creation story; the one that says that everything that exists was created for humanity.

According to Quinn, then, the second creation story does not contain within it the attitudes that would lead to the environmental crisis. He in fact believes the very opposite: the second creation story was written to denounce the Takers, those people who would carry the attitude of humanity's superiority over nature into the future and, eventually, bring about the ecological crisis. Ironically, the story was nevertheless adopted by the Taker people as their own, probably used in some ways to justify the destruction they were inflicting upon

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[39]Quinn, 175.

their neighbours and upon nature, but never fully understood by them because it was based on an entirely different premise from that of their own story.

Ishmael can hardly be called a thorough analysis of the Genesis creation stories, though it may very well be a more detailed study than many presented by other authors in this thesis. All Quinn says about the first creation story is that it ends with the creation of humanity and that all things that were created before the humans were made for humanity's purposes. He does not deal with Passmore's observation, for example, that the plants, in the first creation story, are specifically designated for the use of the animals as well as the humans (Gen. 1:30).[40] Furthermore, theologian Douglas Hall insists that the first creation story, significantly, does not end with the creation of humanity, but with the Sabbath.[41]

Quinn's analysis of the second creation story depends entirely on an idea that he brings into the text but is not stated explicitly in Genesis: the idea that the fruit of the tree of knowledge does not give the humans the wisdom of the gods. According to Quinn, the fruit of the tree of knowledge only acts as a placebo on Adam — it makes him think he is as wise as the gods, though really he is not. Genesis indicates that the humans are changed in some way after they eat the fruit; it is not clear whether they gain the knowledge of good and evil, though they certainly do not gain knowledge equal to God's. Quinn also

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[40] John Passmore, Man's Responsibility for Nature (London: Duckworth, 1980), 8.
[41] Douglas John Hall, Professing the Faith (Philadelphia: Fortress Press, 1993), 348.

does not refer to the story of Adam's naming of the animals, mentioned by many of the authors in the Genesis and ecology debate to demonstrate that the second creation story portrays humanity as superior to the animals. The anthropological evidence that Quinn presents to support his interpretation of Genesis, though, is impressive and convincing.

The relationship between the Genesis creation stories and the environmental crisis that Quinn suggests may be heavily biased by his profession as a novelist. How the attitude expressed in the first creation story, that humanity owns the universe, relates to the environmental crisis relies entirely on the definitions that Ishmael sets out in his first lesson. A story, he says, "is a scenario interrelating man, the world, and the gods." To enact, he adds, "is to live so as to make the story a reality."[42] The environmental crisis, says Quinn, is the result of western society, the society of the Takers, enacting the first creation story. What is needed to reverse the crisis, says Quinn, is a new story:

> I think what you're groping for is that people need more than to be scolded, more than to be made to feel stupid and guilty. They need more than a vision of doom. They need a vision of the world and of themselves that inspires them.[43]

If the enacting of one story led to the crisis, the enacting of a different story can reverse the damage. Though this scheme of attitude, story, and enacting may not be inaccurate, Quinn's fascination with stories could be related to his own

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[42]Quinn, 40.
[43]Quinn, 243.

livelihood as a story-teller. Perhaps Quinn considers Ishmael to be the inspiring story that is needed.[44]

[44]After the final chapter, Quinn concludes: "*Ishmael* has always been much more than a book to me. It's my hope that it will be much more than a book to many of those who read it." For Quinn, Ishmael is not supposed to be merely a work of fiction; it is meant to be an inspiration.

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